

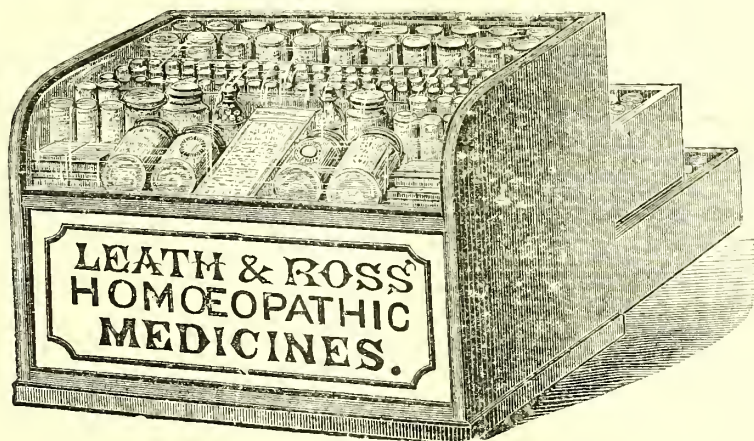
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DESCRIPTION.—A Handsome Bent Glass Case, with three drawers, the contents of top drawer visible, the Pilules and Tinctures arranged in the other two in alphabetical order.

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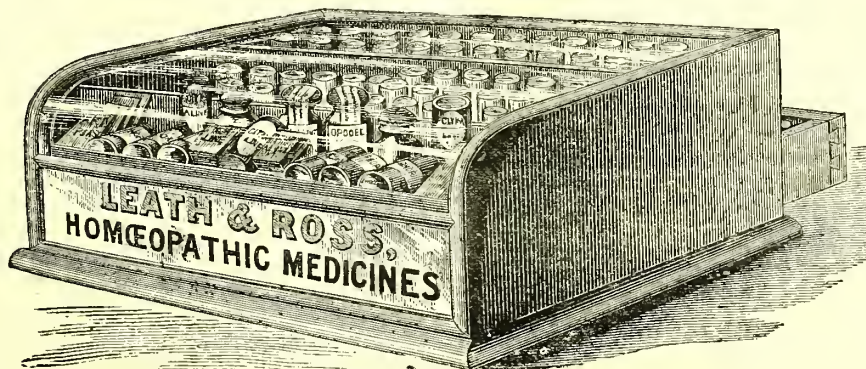
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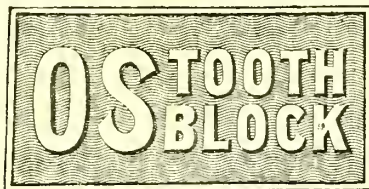
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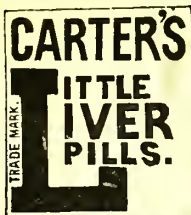
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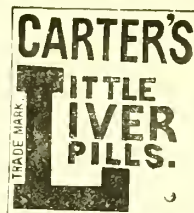
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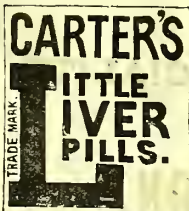
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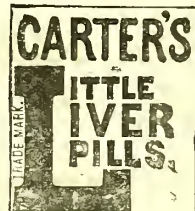
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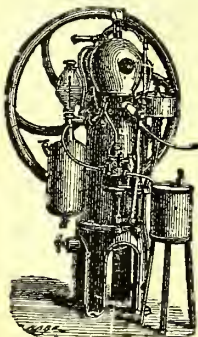
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 Fig. 10. New Bottle Opener, fitted with rubber 6/

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Fig 3.

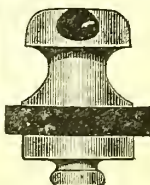


Fig. 6.

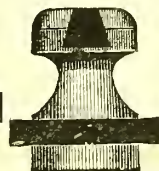


Fig. 1.



Fig. 7.

It will be seen by reference to figs. 6 and 7 that I now form a button or nut under the base of my Stopper for the purpose of easily extracting same from the Bottle without spoiling or removing the indiarubber from the body of the Stopper. This is readily accomplished by the use of a suitable tool made to fit on the nut; the Stopper being grasped in withdrawn from the bottle in a second, without injury to the Stopper. Therefore, it will be a great saving to Mineral Water Manufacturers, as by the old way of extracting the Stoppers from the Bottle, when necessary, very often the indiarubber is spoiled, and the time it takes by this slow process is worth more than the Bottle itself; so that in many instances Bottles with spoiled or dirty Stoppers are put aside as worthless stock.

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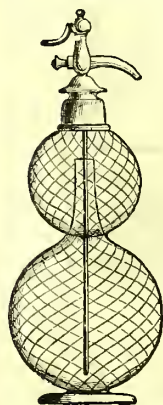
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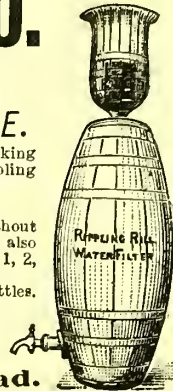
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By Special Appointment to
H.R.H. the Duke of Connaught and the Royal Family



BOURNE WATERS.

THE PUREST IN ENGLAND.

R. M. MILLS & CO.,

BOURNE, LINCOLNSHIRE,

MANUFACTURERS OF

SODA, POTASH, LITHIA, AND SELTZER WATERS,
LEMONADE, AND AROMATIC GINGER ALE.

4-dozen and 6-dozen Cases Carriage Paid

Prices and Pamphlet on application. Agents appointed.

CHEMISTS' TEA AGENCY.

WALKER & DALRYMPLE'S

BROKEN-LEAF TEA, 1s. 8d. per lb.

A MONEY SAVING TEA. ABSOLUTELY PURE.

The small leaf from some of the finest India and China Teas. Produces a Tea in the cup, stronger, richer, and cheaper than most whole-leaf Teas. Agents appointed, where unrepresented, throughout the United Kingdom.

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INTERMEDIATE TEA, 2s. per lb.

BEST at the PRICE EVER SOLD. Great strength and a most useful Tea where there is a large consumption. Recommended to all who wish to SAVE in their Tea. Agents appointed, where unrepresented, throughout the United Kingdom.

WALKER & DALRYMPLE'S TEAS.—
AGENTS APPOINTED, where unrepresented, throughout the United Kingdom.

Prospectus and Samples Free on Application.

Warehouses, 154, 155, 159 and 160 WHITECHAPEL ROAD, and
2, 4, 6, 8, 10, 11, and 12 BRADY STREET, LONDON.

P.O.O. payable at head office. Bankers, the National Provincial Bank of England.

WM. BUSH, SON & CO.

Estab. over] MANUFACTURING CHEMISTS, [40 years.
YORK STREET, WALWORTH, LONDON, S.E.
IMPORTERS OF ESSENTIAL OILS.

SAMPLES AND PRICE LIST ON APPLICATION.

SOLE PROPRIETORS OF

MARIGOLDINE,

NEW COLOUR FOR BUTTER, CHEESE, &c.

After a lengthened investigation, the Proprietors are enabled to offer this novel preparation, representing the rich colour of the Marsh Marigold, in a highly concentrated form. Being a Vegetable Extract, it will be found to impart to Butter a beautiful golden colour, free from taste, possessing its natural odour, and as pure as the herbage on which the animal feeds.

It is well known that in the Spring or Summer the rich colour of Butter is derivable from the Marsh Marigold and Ranunculi (Buttercups) of our pastures, and it has been the aim of the Proprietors to produce an article that will enable the dairymen to obtain uniformly the same results at all times of the year in the most agreeable form; and it is confidently believed that it will be found superior to every preparation hitherto sold for the purpose. Its perfect compatibility with oil and grease of every description (not watery compounds) makes it useful for many other purposes in which it is desired to obtain a rich and delicate golden tint.

Sold by Chemists, &c., and Wholesale Houses.
W. B., Son & Co. solicit inquiries, and will be happy to furnish Samples and Prices at all times.

MARIGOLDINE SUPPLIED IN A SOLID FORM

ROBINSON'S ORANGE WINE.

Specially prepared for Quinine Wine, does not deposit, will keep good in any climate, and well adapted for Export Trade. Supplied in Casks containing 9, 18, 30, 60, or 120 Gallons. Terms on application.

PHARMACEUTICAL SHERRY WINE.

This Wine is well adapted for Pharmaceutical Preparations, and is the strength ordered by the B.P. Price, in 6-Gallon Casks, 5/ per gallon; in 2-Gallon Jars, 5/6 per gallon, carriage paid. Casks charged 7/6, Jars 2/6, and allowed if returned. Cash or satisfactory reference to accompany order.

B. ROBINSON, Distiller and Brewer of British Wines, Church St., Pendleton, Manchester.

12½ gals. for £1, Cask free.

SPECIAL LINES FOR CASH BUYERS!

TYRER'S

WORCESTER SAUCE,

YORKSHIRE SAUCE,

"BOROUGH" KETCHUP.

BEST VALUE THAT MONEY CAN PURCHASE.

Prices and Samples sent free of all cost by

PETER TYRER, The "Borough" Ketchup & Sauce Maker,
LONDON, S.E.

TO DENTISTS AND CHEMISTS.—Every description of Artificial Teeth made at greatly reduced charges. Best work and best materials only.

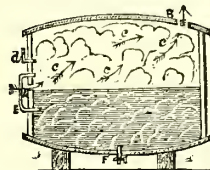
An Upper or Lower Set, inclusive of Teeth Rubber, &c., £1 1s.
Ditto, ditto, on Platina, £2 2s.

Send for Price List.

Twenty years' experience in mechanical work.

LESSONS GIVEN IN MECHANICAL DENTISTRY.

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NEW METHOD OF MAKING VINEGAR,
BY THE REVOLVING APPARATUS
(Michaelis' Patent).

For further particulars

See the Chemists' and Druggists' Diary, 1884, page 274,
OR APPLY TO

PAUL ROTHERMEL,

105 (late of 27) LEADENHALL ST., LONDON.

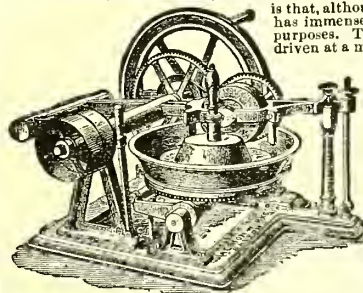
BAILEY'S MINTON-WARE BOWL DRUG MILL.

(CARR'S PATENT.) FOR HAND OR POWER.

Will reduce Crystals to an impalpable powder. The chief feature of this machine is that, although it can be turned with ease, it has immense frictional power for levigating purposes. This is caused by the runner being driven at a much greater speed than the bowl. Diameter of Bowl, 13 inches.

Price, £11.

Lists, &c., on application.



Mr. J. DUTTON, Rock Ferry, Birkenhead, says—"The Mill you sent me answers admirably for powdering all kinds of Salts, and for many other things, such as Opium, Scammony, Soap, Almonds, Mace, &c. It also effects a great saving of time and labour in mixing various powders, such as Tooth Powder, Lemon and Kali, &c., and proves a very useful apparatus in the shop."

W. H. BAILEY & CO., ALBION WORKS, Salford, MANCHESTER.

VEGETABLE BUTTER COLOURING

(OF OUR OWN MANUFACTURE),

FOR imparting to the Butter at all seasons of the year that rich cowslip tint which is such a desideratum to all producers. It is rapidly superseding the Danish and all other makes, being more efficient and cheaper; it does not crust on the bottles, as is the case with the foreign preparations; is free from Aniline, and does not colour the Buttermilk.

To Purchasers of Bulk it affords a considerable source of profit, and is well worth the attention of Druggists in the agricultural districts.

Price **1½** per lb.; **1/** in 2 gal. Bottles.

Special Terms to large consumers.

To meet the views of many of our friends, we have commenced to put this article up in bottles also, under the title and trade-mark of the "Silver Churn." It is very attractively got up, and will command a ready sale; the bottles contain more than either Danish or American, while the price to the retailer is lower than that of any other Butter Colouring in the Market.

Price in Bottles	{	6d.,	1/-,	2/-	Size	} Less 10 per cent. Discount.
		4/-	8/-,	16/-	Per doz.	

A handsome Show Card, printed in colours, and suitable Counter Bills may be had on application.

Copy of Testimonial received May 18, 1886, from Carrick's Cumberland Dairy Co. (Limited), Low Row, near Carlisle:—

"We have subjected your Silver Churn Butter Colouring to a protracted and severe trial, and it appears to us to be the very best article obtainable; the absence of any objectionable taste and smell, the beautiful straw colour imparted to the butter, as well as the very small quantity required, combining to render it both efficient and economical. We have found a teaspoonful sufficient for 24 quarts of cream at this season of the year.

"By continuing the manufacture of a quality equal to that you have supplied to us, you cannot fail to secure the good opinion and patronage of all users.

"(Signed)

Yours faithfully,

J. A. STEPHENSON,

"Manager and Dairy Expert."

PROPRIETORS AND MANUFACTURERS—

OLDFIELD, PATTINSON & CO.,

WHOLESALE DRUGGISTS,

17 TODD STREET, MANCHESTER.

May be ordered through any Wholesale House, or of our

London Agent—B. SUART, 24 Queen Victoria St. (who holds Stock of all sizes).

Liverpool Agents—AYRTON & SAUNDERS, Duke Street.

SUPPLEMENT TO "THE CHEMIST AND DRUGGIST."

SATURDAY, OCT. 9, 1886.

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Telephone Number,
1852.

Advertisers' & Buyers' Reference List, AND INDEX TO ADVERTISEMENTS.

TELEGRAPHIC ADDRESS—
CHEMDRUG
LONDON.

ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

Please note that to satisfy Post Office requirements the Advertisements are paged twice—once in Arabic, once in Roman numerals.

AI MENTHOL CONES Menthol in Variety iv	FINK, FRED., & CO. Glycerine, Gums, &c. 12	METZ, P. Willow Boxes xi
ALLEN & HANBURY'S Jubiles and Pastilles, Wholesale Druggists COVER	FOLLOWS & BATE Druggists' Machinery of all kinds vi	MILLS & CO. Bourne Aerated Waters 9
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APOLLINARIS CO. Apollinaris Water xi, Hunyadi Janos 5	GILLOTT, J. Pens 18	MUMFORD, G. S. Lined, Starch, Fuller's Earth, &c. TEXT 490
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CLASSIFIED LIST OF ALL ADVERTISERS

Whose Announcements appear in "THE CHEMIST AND DRUGGIST." Those whose Names do not appear above are published in one of the other issues of this month.

AERATED AND MINERAL WTS AND PLANT	Acetic Acid	AGENCIES ABROAD	BANDAGES
[See SYPHONS and ESSENCES.]	Dunn and Co.	Cocking (Japan)	Bailey and Son
Aesculap Bitter Water Co (Lim.)	Hirst, Brooke and Hirst	Davison, A. [delphia]	Bole Hall Mill Co.
Apollinaris (Hunyadi, Friedrichshall and Apollinaris)	Linsey, G. R., and Co.	Elmer and Mendelson (Philadelphia)	Gibbs, Cuxson, and Co.
Barnett and Foster	ALKALOIDS	Evans, Sons and Mason (Canada)	Liverpool Lint Co. band
Bratby and Hinchliffe	Howards and Sons (Cinchona) Smith, J. and H.	Felton (Melbourne)	Robinson and Sons
Bush, W. J., & Co. (Foam Producer, &c.)	AMMONIA	Fougères (New York)	Seabury and Johnson
Chemists' Aerated Waters Association	May and Baker	Hormusjee Ruttonjee (Bombay)	Statham and Co (Porcus Elastic)
Ellis (Ruthin)	Hirst, Brooke and Hirst	Kemphorne (Nw. Zealand)	BANK
Favargant, H.	Follows and Bate, Lim.	Lennon (Port Elizabeth)	Birkbeck Bank
Gerant and Co.	Maud, W. R. (Measuring)	MacNaughtan (New York)	BATH GLOVES
Guert Frères	May, Roberts (Water-bath)	Mayhew, E. (Watin. Australia)	Pattinson, G.
Haston & Co.	Morgan, Crucible Co.	Phillips and Co. (Bombay)	BEDS, WATER
Hasell and Co. (Citric Acid, Phospho)	Orme (Scientific)	Prosser, E., and Co. (Sdney)	Hooper and Co.
	Pat. Plumbago C. Co.	Roberts (Paris, &c.)	Hutchinson, A., and Co. (Sheeting Rubber)
	Rothmerl, Paul (Vinegar)	Rocke (Melbourne)	BEE-SW & HONEY
	Walters Otto (Balances)	Sharland & Co. (Auckland N.Z.)	Kemp, W., and Son
		Shirreffs and Co. (Allahabad)	
		Symes and Co. (Simla)	

BICARB. SODA

Brunner, Mond and Co.
Gaskell, Deacon and Co.
Howards and Sons
May and Baker

BISMUTH PREP.

Howards and Sons
May and Baker

BOOKS

Lewis, H. K.
Tully, J.
Dobell, Dr. (Bournemouth)

BOTTLES

Ayrton and Saunders
Barnett and Foster (the
"Eclipse" Stoppered)
Bratly and Hinchliffe
Brooks, Peel (Perfumers)
Glasgow Apothecaries' Co.
Harris and Co.
Hearn, Riddle
Hunt's Bottle Caps
Isaacs, J., and Co.
Kilner Bros.
Lang, J., and J.
Poths
Simcock, T.
Simcock, W.
Thompson, Millard and Co.
Toogood (Feeding)
Vallie

BOXES

Austin and Co. (Cardboard)
Ayrton and Saunders (Willow)
Bratly and Hinchliffe
Estes' Turned Wood
Metz, Paul (Pine and Willow)
Noakes, B., and Co.
Robinson and Sons (Cardboard)
Rogers, J., and Co.
Self-Opening Tin Box Co.

BROMIDIA

Battle and Co.

BRUSHES

Dukas and Co.

BUTTER COLOUR

Bush, W., Son, and Co. (Mari-
goldine)
Oldfield, Pattinson and Co.

CAMPHOR

Howards and Sons (pathic)
Keene and Ashwell (Homoeo-
May and Baker
Murray, Sir James (Fluid)

CAPSULES

Betts and Co. (Metallic)
Denoual, J. (Medicinal)
Hooper, B., and Co.

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Bush, W. J., and Co.
Sellers

CEMENT

Foulkes
Key (Cosguiline)

CHALK PRECIP.

Dunn and Co.
Levermore, Ang., and Co.

CHEMICALS

Bramwell, E., and Son
Brunner, Mond and Co. (Bicar-
bonate of Soda)
Bush, W., and Co.
Dunn and Co.
Gaskell, Deacon and Co. (Bi-
carbonate of Soda)
Howards and Sons (Pharma-
ceutical)
May and Baker
Smith, T. and H.
Sumner, R., and Co.
Sutton and Co. (Volumetric
Analysis)
Type and King
Walker, Troke and Co.
Zimmermann, A. and M.

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Lynch and Co.
Pattison, G.

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Bage, T., Blyton, and Co.
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Freeman
Towle, A. P.

CHLOROFORM, &c.

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Macfarlan, J. F.
Smith, T. and H.
Zimmermann

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Fry (MalTED)

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Hertz and Collingwood
(Jensen's)
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Smith, T. J.
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George and Welch (Dandelion)
Symington (Various Essences)

CMRPSD MDCNS

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Leo's Tablets

Newbery, F., and Sons

CORN CURES

Robinson, B.
Young's

COTTON WOOL.

Haynes and Co.

CRUCIBLES

Morgan Crucible Co.
Pat. Plumbago Co.

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Beddard, J.
Jewsbury and Brown
Martin, J. W. (Rozallum)
Rimmel
Sutton, O., and Co.
Thompson and Capper
Woods, W. (Arcaea Nut)

DENTISTRY

Buck, F. (Lewsons)
Jones, Dr. C. H. (Mechanical)

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Government Sanitary Co.
Harrison and Co. (Hydroleine)
National Chemical Co.
Rimmel
Sanitas
Steele & Co. (Chloride of Lime)
Vogt, G.
Wileys and Co. (Pure Terebene)

DOG MEDICINES

Spratts (Patent) ("Fibrine")

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Carter, J. H.
Follows and Bate (Entrprs.)
Werner and Pfeiderer

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Beiss Bros.
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Evans, Lescher and Webb
Lairitz (Pine Wool)
Lynch and Co.
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Maw, S., Son and Thompson
May, Roberts and Sons
Newbery, F., and Sons
Schutze and Co.
Simcock, W.
Thompson, Millard
Toogood

DUBBIN

Jamieson and Co.

DUTCH MEDCNS.

Bieber, J. D.

DYES

Ayrton and Saunders
Judson's (Patent Show Case)

EAU DE COLOGNE

Farina, J. M. (Gegenüber)

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Orme and Co.

ENEMAS

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Lynch and Co.
Schutze and Co.

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AND SOLUBLE

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Bush, W. J., and Co.
Fletcher, Fletcher and Steven-
son
Jackson, J., and Co.
May and Baker
Meadowcroft, W.
Stevenson and Howell
Sumner and Co. (Ginger Ale)
Sutton, Francis and Co. (Stan-
dard Solutions)
Type and King (Pear and
Pineapple)

EXTRACT, MEAT

Brand and Co.
Burgoyne, Burdidge and Co.
(Dr. Kochs)
Coleman & Co.
Liebig Co.
Poths (Leube Rosenthal)

ETHER

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Howards and Sons [(Chloric)
May and Baker
Robbins

ESSENTIAL OILS

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Bush, W. J. (Lemons, &c.)
Clay, Dod & Co.
Cocking (Japan Peppermt)
Jackson, J. & Co. (Peppermt. &c.)
May and Baker
Roeke, Tompsitt (Encalyptus)
Stallman and Fulton
Stevenson and Howell
Vogt, G.

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Barber, G., and Co.
Burgoyne, Burdidge
Fletcher, Fletcher & Stevenson
Howards & Sons
Stearns, F., and Co.
Thompson, Henry Ayscough, and Son

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Foulkes

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Hearn, Riddell and Co.
Kilner Bros.
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May, Roberts, and Co.
Simcock, T.
Thompson, Millard and Co.
Toogood, W. ("The West-
minster")

FILTERING

Doulton and Co.
Dunlop, Mitchell and Co.
Maiknen (Filter Rapide)
Silicated Crbn Filtr Co.

FOOD, INFANTS'

AND INVALIDS

Clarke, S. (Food Warmers)
Hearon, Squire & Francis
Maclean, Revalenta
Nestle, H.
Savory and Moore (Pancreatic)
Southall Bros. and Barclay
(Prepared Milk)
Van Abbott (Diabetic)

FORMULE

Brooke, T.

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Chubb, J., and Co.
Hynam, J.
Rouse and Co.

FUNNELS

Maud, W. R. (Self-acting)

GINGER ALE

Mills, R. M.
Ross and Co.
Schweppe (Dry)
Sumner, R., and Co.

GINGER - BEER

POWDERS

Kemp and Son

GLYCERINE

Fink
Price's Candle Co.

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Allen and Hanburys
Bush, W., and Co.
Goodall, Backhouse and Co.
Stearns, F., and Co.

GRINDING MCNS

Bracher and Co.
Carter's Disintegrators
Follows and Bate
Werner and Pfeiderer

GUMS

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GUTTAPERCHA

Duncan, Flockhart
Stevens, P. A. (White)

HAIR PREP.

Ayrton and Saunders
Capper, W. B. (Crimedone)
Chesbrough Mfg. Co.
James and Co. (Herbl. Pom.)
Rimmel
Sturrock's Oleasna
Towle's Toilet Cream (Thorn-
ton)

HOMOEOPATHIC

Bristol and W. of England
Epps, James, and Co.
Gibbert, W.
Keene and Ashwell
Leath and Rose
Thompson and Capper

HOPS

British Hop Packing Company

HARNES POLISH

Jamieson and Co.

HERBALISTS

Butler, McCulloch
Potter and Clarke

HOSPITALS

London Homoeopathic

ICE

Barnett and Foster

INHALERS

Evans, Sons and Co.
Maw, S., Son and Thompson

INK

[See MARKING.]
Antoine
Bewley and Draper
Duncan, Flockhart
Jamieson and Co.

INSECTICIDES

Galzy, E.
Sumner, R., and Co.
Vogt, G.
Woolley & Son (Dalmatian pdr)

JUJUBES

Allen and Hanburys
Bage Blyton and Co. (Chlrdym)

KETCHUP

Tyler, P.

LABELS

Blake and Mackenzie
Ford, Shephard and Co.
Townsend (Exeter)

LANOLINE

Burroughs, Wellcome and Co.

LARD

Ewen, J.

LEATHER

Shaw, Alexander and John

LEECHES

Butler, McCulloch
Fitch and Nottingham
Potter and Clark

LICORICE

Craven, M. A., and Son
Maud (Compound)

LIME JUICE

Felton and Sons (Spécialité)
Ross and Co.

LINSEED

Kemp, W., and Sons
Mumford

LINT

Liverpool Lint Co.
Newsome (Surgeons
Robinson and Sons
Seabury and Johnson

LOZENGES

Allen and Hanburys
Bage, Blyton and Co.
Craven, M. A., and son
Gibson, R. (Manufacturer)

MAGNESIA

Dinneford (Fluid)
Murray, Sir James (Fluid)

MALT EXT., ETC.

Poths (Dr. Linck's)

MARKING INKS

Barber, G., and Co. (Crimson)
Christian, J.
Hooper, W., and Co.
Judson, J., and Son, Limited
Murphy, J.

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A 1 Menthol Depot, J. G.
Shirley, Proprietor
Boehm, J. (Charms)
Cocking and Co.
Dundas, Dick & Co.
Metz, P. ("Acme" cones)
Spies Bros. (Cockings)

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Howards and Sons
May and Baker

METAL CASKS, &c.

Noakes, B., and Co.

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Gibb, J., Smith and Co.
McNair and Co.
Phillips G., and Co.

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Carter, J. H.
Follows and Bate
Sherwin, G. E.
Werner and Pfeiderer

MORPHIA

Macfarlan and Co.
Smith, T. and H.

MUSH

Wink, J. A., and Co.
Symes and Co. (Thibet)

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Finch, Rickman
Johnson, J. H. and S. (Ess. Oil)

MUSTARD LEAVS.

Metz, Paul

NIGHT LIGHTS

Clarke, S.

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Binghampton Oil Refining Co.
Bush, W. J., and Co. (Sandah
Wood)

Elvin Bros.
Farmiloe, Geo., and Sons
Follows and Bate (Mill)
Peace, J. R., and Co.

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Chesbrough (Vaseline)
De Pass, E. A., and Co. (Petrolina)
Evans, Sons & Co. (Pessiline)
Grindley (Petroleum Jelly)
Halter and Co. (Lanoline)
Metcalfe & Co. (Pure Wool Fat)
Saunders, C.

PAPAIN

Kuhn, B. (Papain-Finkler)

PAPER (Sanitary)

Bourne, Johnson & Co.
Wall and Co. (Wax Paper)

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Zimmermann, A. and M.

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Barclay and Sons (General)
Besham (Pills)
British College (Morrison's)
Burgess, E. (Lion Ointmt)
Carter's Little Pills
Davenport (Chlorodyne)
Edwards and Son
Fennings' (Powders)
Freeman, R. (Chlorodyne)
George and Welch (Liver)
Hayman, A. (Balsam of
Horehound)
Henry's Indian Remedies
Holloway (Pills and Oint.)
Hop Bitters
Horsford (Acid Phosphate)
Kay Bros.
Lairitz's Pine Wool
Lalor (Phosodine, &c.)
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Learoyd, E. B. (Kof Kur)
Maud, W. R. (Worm Cakes)
Munday, J. (Injection Day)
Newbery and Sons
Roberts (Foreign)
Sanger and Sons
St. Dalmas (Bronchial, &c.)
Smith (Antibillous Pills)
Spratts (Locurium Oil)
Stearns' Non-secret
Stedman (Teething Powders)
Sumner and Co. (Angel's Food)
Thompson, Millard and Co.

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Macniven and Cameron

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Cocking (Japan)
Jackson, J., and Co.

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Bullock and Co.
Burroughs, Wellcome
Fletcher, Fletcher and Steven-
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Jensen, C. L.
Keene and Ashwell
Savory and Moore (Pancreatic
Emulsion, Peptonised Milk)
Warner and Co. (Inglinin)
Zimmermann

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[See EAU DE COLOGNE.]
Barclay and Sons
Boehm Gustav (Various)
Briedenbach, Smelling Salts
(inexhaustible)
Chesbrough Manufacturing Co.
De Pass & Co. (Pch. Blom.Sp.)
Ewen (Soap)
Houbigant (Perfume)
Jackson, J., and Co. (Lavender)
Mann, C. A.
Maubert's (Soaps, &c.)
Mousser & Co. (Toilet Soap, &c.)
Newbery
Rimmel, E. (Specialities)
Sainsbury, S. (Lav. Water)
Shaw, Alex., and John (Per-
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West, T. (Ockell's Mona)
Woolley, Sons and Co. (Powder)

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Dunn and Co.
Robbins

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Sellers, J. (Carmine Par.)

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Peace, J. R., and Co.

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Dodd and Co.
Evans, Sons and Co.
Holloway
"Mc K. & R." (ovoid-capsuled)
Smith, W. F.
Warner, W. R. (Coated)
Wyleys and Co. (Gelatine Oval)

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Burroughs, Wellcome and Co.
Fairchild's Preparations
Clay, Dod and Co.
Duncan, Flockhart
Fellows (Hypophosphites)
Fletcher, Fletcher, & Stevenson
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Howards and Sons
Key Bros.
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Woolley, Sons
Wright, Layman and Umney
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Seabury and Johnson
Taylor, E.
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Macfarlan and Co.

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Evans, Lecher and Webb
Evans, Sons and Co.

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Southall Bros. (Sea Salt)

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Bieber, J. D.

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Lazenby (Harvey's)
Tyer

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London Homoeopathic
Manchester College
South London School
The School of Pharmacy
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Westminster College

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Holman Liver Pad Co.
Hooper and Co. (Water Beds)
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Lynch and Co.
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Maw, Son and Thompson
Powell and Barstow (Elastic Gum Instruments)
Schutze, F., and Co.
Scott, W. A. (Gastric, etc.)
Seabury and Johnson (Tissues)
Stephenson and Travis
Thompson, Millard

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London Rubber
Pollard, A. W

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Harrop's Glaze

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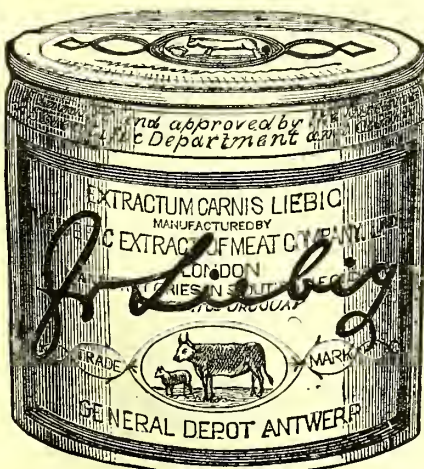
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Evans, Lecher and Webb
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Hearon, Squire and Francis
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Southall Bros. and Barclay
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Sumner, R., and Co.
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Woolley, Jas., Sons and Co.
Wyleys and Co.

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Coleman and Co. (Wine)
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IMPROVED AND ECONOMIC COOKERY.**USE LIEBIG**Extracts sold as **BARON** Liebig's
have no connection with the Baron.**COMPANY'S
EXTRACT
OF MEAT.**Being the Finest Meat-flavouring Stock, **USE**
it for Soups, Sauces, and Made Dishes.Efficient Tonic. Highly recommended as "NIGHT CAP" instead of alcoholic drinks.
ONLY SORT GUARANTEED GENUINE BY BARON LIEBIG.

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(REGISTERED)
POWDER OR PASTE
IS THE BEST DENTIFRICE.

It is scientifically prepared by a Dental Surgeon, of large practice and great experience, and is intended to supply a long felt want, viz., a Preparation that will thoroughly cleanse the Teeth, and at the same time help to preserve them. As a stimulant to the Gums, and a preservative of the Teeth, Rozalium is not to be surpassed; it gives to the Teeth a pearly whiteness, to the Gums a healthy rosy colour, whilst it prevents decay by neutralizing the acids which accumulate between the Teeth, and imparts to the Breath a most delicious fragrance.

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STOP!! 25/-worth of A1 MENTHOL will realise 48/,
Or a Profit of 23/, which is over 90 per cent.

Send a cheque for 25/, and I will forward either of the following, together with a HANDSOME GLASS-FRONTED SHOW CASE and ROUND HANDBILLS:—

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3 dozen 1s.
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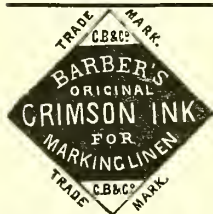
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Used in the Royal Nurseries, and highly recommended by the Faculty; it protects the Skin from cold winds, chaps, &c., and preserves the Complexion.

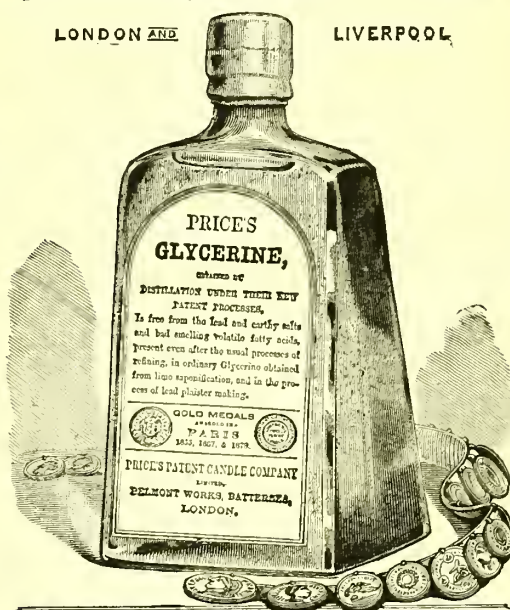
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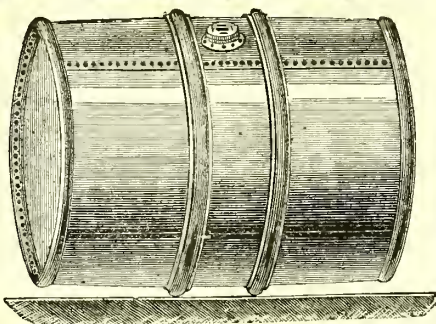
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Metallic Casks, Drums, & KegsENAMELLED, PLAIN, AND DECORATED
TIN CANISTERS AND BOXES,
FOR PACKING CHEMISTS' AND DRUGGISTS' SUNDRIES.**ENAMELLED SHOW CARDS.**IRON BARRELS,
CAPACITY 40 TO 120 GALLONS
AS PER ILLUSTRATION.Cable and Telegraphic Address—
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They are specially adapted for all kinds of Chemical Products, Sulphuric Acid, Glycerine, Spirits, Oils, Turpentine, Petroleum, Benzoline, Varnishes, Tar, Naphtha, Mineral Extracts, and Inflammable Liquids of every description.

We are making them in three qualities, "Black Iron," "Lead Coated," and "Tinned."

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SUPERIOR GUARANTEED SUPERIOR QUALITY.
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EXTRA STRONG.
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More economical than ordinary Size; more readily prepared for use
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CHUBB'S Best SEIDLITZ POWDERS

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FREE FROM POISON
AGREEABLE IN SMELL.**THE GOVERNMENT SANITARY CO.,**TO BE HAD FROM ALL
WHOLESALE DRUGGISTS**GENUINE EMERY, EMERY CLOTH, AND BLACK LEAD.****JOHN OAKLEY & SONS,**

MANUFACTURERS OF

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Prepared expressly for Oakley's Patent India-Rubber Knife Boards, Buff Leather Boards, and all the Patent Knife Cleaning Machines. Sold in Canisters
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A Magic Pomade for cleaning Brass, Copper, Tin, Pewter, Britannia Metal, &c. Never becomes dry and hard like other Metal Pastes.
Tins 1d., 2d., 3d., and 6d. each.

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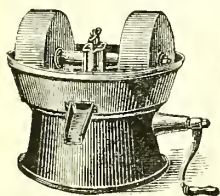
WELLINGTON EMERY & BLACK LEAD MILLS, Westminster Bridge Road, London, S.E.

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PATENTEES & MANUFACTURERS OF ROUND CARDBOARD AND OTHER SHAPED BOXES,
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SPECIALTIES.

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PRICES AND PARTICULARS ON APPLICATION.



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(GRIFFIN'S PATENT),

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THE NEW TIN BOXES for all kinds of Hermetically Sealed Preserved Foods, DRUGS and CHEMICALS.

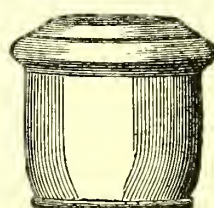
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THE NEW TIN BOXES are described by the *Times*, *Standard*, *Chronicle*, *Illustrated News*, *Engineer*, *Grocer*, *Oil and Colourman*, and Press generally, as the "neatest and most elegant invention ever made."

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Turners of every description of Tooth Powder, Plate Powder, Pill and Puff Boxes, used by Chemists, Perfumers, &c.
All Boxes of our make are finely finished. Patentees and Manufacturers of the

SILICATED GREASE PROOF BOXES

These Boxes are turned out of Willow and Silicated inside, rendering them quite grease proof, and will be found very convenient to send by Post. They are very light, being one-sixth the weight of covered pots. They are not breakable. The lids fit quite air-tight. They will stand in any climate. They are cheap.

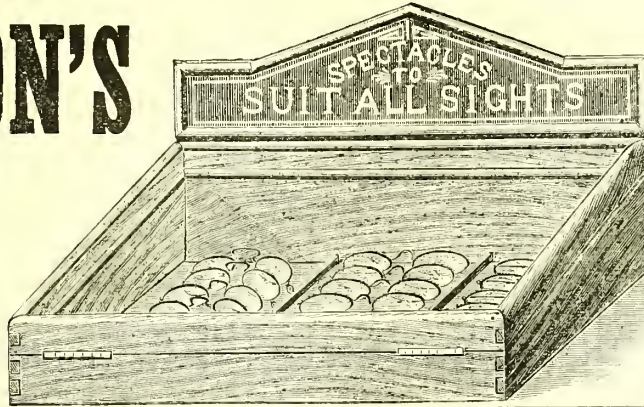
SPECIAL NOTICE.

Our Boxes being made of White English Willow will not injure the most delicate preparations, and will be found quite free from the objectionable oily smell of some Boxes now being sold.

BEFORE ORDERING TURNED WOOD BOXES PLEASE SEE OUR SAMPLES AND PRICES.

DARTON'S

SHOW CASES of SPECTACLES.



CHEMISTS commencing the Spectacle business will find these Show Cases arranged with an assortment of Spectacles and Folders of all sights, to meet the requirements of purchasers. The quality and quantity may be varied to suit any class of trade at customer's wish. The Spectacle Show Case is of Solid Polished Mahogany, well made and finished, to stand any climate. A large Coloured Show Card is sent with each case.

"THE CHEMIST AND DRUGGIST," May 15, 1886, says:

"Messrs. F. DARTON & CO., of 45 St. John Street, West Smithfield, who have long made a speciality of supplying Chemists with spectacles and some scientific instruments, and have thus gained considerable experience as to the requirements of beginners in the business, have followed up this experience by fitting up a number of show cases with various stocks, enabling chemists to start in the trade with the minimum of risk and the maximum of facility. The cases are well made, and are quite ornamental, and the spectacles are sold at very moderate wholesale prices, presenting an opportunity for a rate of profit to which chemists are getting unaccustomed."

The following is a summary of the contents of our £2 2s. Case, which bears a profit of 36/-, after paying for Show Case and Sight Tester, for which we allow 15/- if not required.

		s.	d.
2 Dozen Steel Frame Spectacles, Joints, with Screw and Pin	to sell 1/0 per pair	7	0
1 " Ditto, better quality, stout frames, Straw or Blue Steel	" 2/6 "	10	6
1 " Folders, Steel Frames and Placquets	" 1/0 "	5	6
1 " Leather Tuck Spectacle Cases	" 6d. each	2	6
1 " Folder Cases	" 4d. "	1	6
Show Case and Sight Tester		15	0
		£2	2 0

Our £3 3s. Case contains -

		s.	d.
2 Dozen Steel Frame Spectacles, Joints, with Screw and Pin	to sell 1/0 per pair	7	0
1 " Better quality ditto, Straw or Blue Steel, best White Glasses	" 3/6 "	13	0
1 " Folders, Steel Frames and Placquets	" 1/0 "	5	6
1 " Best Nickel Folders	" 3/6 "	16	0
1 " Spectacle Cases, Leather	" 6d. each	3	0
1 " Folder Cases	" 4d. "	1	6
Show Case and Sight Tester		15	0
		£3	3 0

Our £6 6s. Show Case contains -

		£	s.	d.
2 Dozen Steel Frame Spectacles, Joints, with Screw and Pin	to sell 1/0 per pair	7	0	
1 " Ditto, better quality	" 1/6 "	6	6	
1 " Ditto, better quality, stout frames, Blue or Straw Steel	" 3/6 "	15	0	
1 " Light Straw Steel Spectacles	" 5/6 "	1	4	0
1 " Folders	" 1/0 "	5	6	
1 " Ditto, Nickel	" 3/6 "	16	0	
1 " Ditto, light grooved, invisible	" 5/6 "	1	1	0
1 " Frog Mouth Cases	" 1/0 each	7	0	
1 " Tuck Cases	" 6d. "	2	6	
1 " Folder Cases	" 4d. "	1	6	
Large size Show Case and Sight Tester		1	0	0
		£6	6 0	

Our £10 10s. Case contains -

		£	s.	d.
3 Dozen Steel Spectacles, Joints, with Screw and Pin	to sell 1/0 per pair	10	6	
2 " Ditto, better quality	" 2/6 "	1	1	0
1 " Light Straw Steel ditto, best White Glasses	" 5/6 "	1	4	0
1 " Invisible ditto, ditto, ditto	" 6/6 "	1	10	0
1 " Blue and Straw Steel Frames, with Pebble	" 7/6 "	1	13	0
1 " Tinted Spectacles, assorted colours	" 2/6 "	10	6	
2 " Folders, Steel Frames and Placquets	" 1/0 "	11	0	
1 " Ditto, Nickel and Shell Placquets	" 3/6 "	16	0	
1 " Ditto, Light Invisible	" 5/6 "	1	1	0
1 " Best Morocco Frog Mouth Cases	" 1/0 "	7	0	
1 " Leather Tuck	" 6d. "	2	6	
1 " Folder Cases, best	" 6d. "	2	6	
Large size Show Case and Sight Tester		1	1	0
		£10	10 0	

LARGER ASSORTMENT OF SUPERIOR PEBBLE SPECTACLES AND FOLDERS, &c., £21.

Send for fully Illustrated Catalogue and Descriptive Pamphlet, with Table of Sights, post free on receipt of Trade Card.

Please order in full, Darton's Show Cases of Spectacles, when ordering through your Agents.

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As specially noticed in the *Lancet*, *Chemist and Druggist*, &c., can be obtained only of the Inventors and Makers; cannot get out of order, and are therefore specially suited for export.



No. 2.

Darton's Improved Imperishable Index	42/ per doz.
Ditto, improved broad bore, magnifying, &c.	54/ "
Ditto, lens front magnifying	78/ "

One bent and one straight 6-in. Clinical Thermometer in morocco snap case 9/ the set.
Special terms to large buyers. All our tubes w^o warrant. See Certificates to any of above.

F. DARTON & CO.,

WHOLESALE OPTICIANS, MAKERS TO HER MAJESTY'S GOVERNMENT,

45 ST. JOHN STREET, WEST SMITHFIELD, LONDON, E.C.

ESTABLISHED 1834.

Telegraphic Address—"EXCEPTIONAL LONDON."

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BURROUGHS, WELLCOME & CO.'S NEW PREPARATIONS.**ANTIPYRIN TABLOIDS.**

The new Antipyretic (a chinolin derivative).

EUCALYPTINE (BURROUGHS).

Powerfully antiseptic. For Strains, Sprains, Bruises, Scalds, Lameness, etc.

ZYMINE (EXTRACTUM PANCREATIS), FAIRCHILD.

For predigesting food of all kinds, for Invalids and Infants.

ZYMINE TABLOIDS.

Prescribed in Intestinal Dyspepsia.

COMPOUND ZYMINE TABLOIDS.

Prescribed in Bilious Dyspepsia.

PEPSIN IN SCALES (FAIRCHILD).

One grain digests 1,000 grains of egg albumen.

PEPSIN TABLOIDS.

For Gastric Dyspepsia. Children like them as sweets.

PEPTONISING POWDERS (FAIRCHILD).

One of these predigests a pint of milk in a few minutes.

ARTIFICIAL SPONGES AND WOUND PADS.

Antiseptic or plain. One of them will absorb fifteen times its weight of water or blood.

TEST TABLETS.

For freshly preparing Fehling's Solution.

PURE TEREbene (BURROUGHS).

The new remedy for Winter Cough and Flatulence.

TRYPSIN (FAIRCHILD).

For dissolving away the membrane in Diphtheria. A pancreatic digestive ferment.

CODMAN AND SHURTLEFF'S STEAM ATOMIZER.

The steam may be medicated as desired.

URETHANE TABLOIDS.

The new Hypnotic. (A salt of Carabamic Acid).

TRINITRINE TABLOIDS.

Discovered by Dr. Murrell to relieve Angina Pectoris.

TRINITRINE COMP. TABLOIDS.

(Nitro-Glycerine, Nitrite of Amyl, Capsicum, Menthol.)

Prescribed for fatty heart, and at the onset of an epileptic aura, but especially for angina pectoris.

STROPHANTHUS.

A cardiac tonic ; it does not constrict the arterioles.

VALOIDS.

Equivalent fluid extracts of definite strength, for the immediate preparation of Tinctures, Syrups, Infusions, etc.

HYPODERMIC TABLOIDS.

The LANCET :—"They are very soluble and not at all irritating."

HAZELINE.

Anodyne, Sedative, Antiseptic, Hæmostatic, and Tonic.

BURROUGHS CHLORIDE OF AMMONIA INHALER.**VEREKER'S PATENT.**

"It is the best I have used, and I think I have tried all."—R. FRANKS, Dublin University.

MEDICAL POCKET CASES.

The best, most convenient, durable, and economical.

COMPLETE HYPODERMIC POCKET CASES.

For Syringe, Needles, Tubes of Hypodermic Tabloids, etc.

VAGINAL TAMPONS.

Antiseptic. As recommended by Dr. FANCOURT BARNES.

ELIXOIDS.

They effectually disguise every unpleasant quality, and are most elegant and palatable preparations.

LANOLINE.

The best basis for ointments.

MENTHOL PLASTERS.

In single plasters and yard rolls.

BURROUGHS, WELLCOME & CO.'S PAGE.

COMPRESSED TRI-NITRINE "TABLOIDS OR TABLETS"
AND COMBINATIONS.

"Tri-nitrine is the new name for nitro-glycerine, the general adoption of which has been advocated by Dujardin-Beaumez, Huchard, and other Continental observers. Its occurrence in prescriptions is less likely to alarm the susceptibilities of delicate, nervous, or highly-strung patients than the more commonly employed term."—THE LANCET.

It is well known that in an attack of Angina Pectoris, or Suffocative Breast Pang, there is increased arterial tension, supposedly due to stimulation of the vaso-motor nerve centres, and with this a filling up and dilating of the left cardiac chambers; also that when an attack proves fatal, these last are found dilated. The vaso-motor spasm extends to the cardiac vessels (Gairdner). A general contraction of the arterioles throughout the body overfills the right cardiac cavities and causes embarrassment.

If the sphygmographic tracings of two persons, one suffering from Angina Pectoris and the other under the influence of nitro-glycerine, be compared, they will show directly opposite conditions. Angina contracts the arterioles, while nitro-glycerine dilates them, and is the agent almost universally prescribed for this disease.

Nitrite of Amyl has long been known to produce flushings as soon as inhaled, and Dr. Benj. Ward Richardson has recommended it for spasmodic conditions. Dr. Arthur Gamgee showed that it diminished arterial tension, and Dr. Lauder Brunton applied it to Angina Pectoris. He says, that with it, "The pain usually disappeared in three-quarters of a minute." Its action is immediate, not always reliable, and often transitory. Nitrite of Amyl is considered of wonderful value in epilepsy; a pearl containing it, if crushed in the handkerchief and the contents inhaled just as the *aura* appears, frequently averts a seizure.

Tri-nitrine (Nitro-glycerine) was discovered by Dr. Wm. Murrell for Angina Pectoris, the prize of the French Academy of Medicine having been awarded him after the three years test. "It is useful in Angina Pectoris, headache, neuralgia, epileptic vertigo, and epilepsy. Its action [as demonstrated by sphygmographic tracings] being more persistent than that of Nitrite of Amyl, it is more efficacious" (Brunton). "I have seen cases," says Dr. Ringer, "where the relief from Amyl was very transient, but much more persistent from nitro-glycerine." Tri-nitrine has been given with satisfactory results in Bright's disease of the kidneys. Dr. Matthew Hay has shown that in the body two-thirds of its nitric acid forms a nitrite, and the other third a nitrate.

TABLOIDS OF COMPRESSED TRI-NITRINE.

THE LANCET says:—"The tabloids of compressed tri-nitrine are made with sugar of milk, which is admirably adapted for the purpose, and dissolves much more rapidly than any of the ordinary employed excipients. We have made trial of these new Tabloids, and find that they answer admirably in cases of Angina Pectoris, giving prompt relief in the paroxysms of pain."

In full doses Tri-nitrine accelerates the heart's action, dilates the arterioles, flushes the face, and produces headache. An excessive dose may cause languor, nausea, pain in the stomach, and occasionally even temporary unconsciousness (Bartholow). The Compressed Tri-nitrine is supplied in 1/50 gr. and 1/100 gr. Tabloids.

TABLOIDS OF COMPRESSED TRI-NITRINE AND
AMYL NITRITE.

Tri-nitrine	...	...	...	...	1/100 gr.
Nitrite of Amyl	...	...	...	...	1/4 "

The immediate action of the Amyl Nitrite may be reinforced by the more permanent effects of the Tri-nitrine. Tri-nitrine in this form is highly recommended by the profession to take at the oncome of a paroxysm, and in moderately severe cases.

TABLOIDS OF COMPRESSED TRI-NITRINE COMP.

Tri-nitrine	...	...	...	...	1/100 gr.
Nitrite of Amyl	...	...	...	...	1/4 "
Capsicum	...	...	...	...	1/50 "
Menthol	...	...	...	...	1/50 "

DIRECTIONS.—One Tabloid every three hours, and also immediately before each attack of Angina Pectoris. The dose may be gradually increased till its full physiological action is produced.

Dr. Murrell states that often in Angina Pectoris if anything not warm be taken internally it is apt to aggravate the symptoms. The skin is blanched, and the patient is cold. Capsicum stimulates the embarrassed heart, and exerts a most beneficial action upon the skin. Menthol increases the absorbability of Tri-nitrine. If Tri-nitrine and Nitrite of Amyl be administered simultaneously the action of the latter is immediate, being soon followed by that of the Tri-nitrine.

At the beginning of a bad attack of Angina Pectoris, and in very severe cases, an excellent way is to administer tri-nitrine as in the Tabloids of Compressed Tri-nitrine Comp. THE LANCET says (April 24th, 1886):—"The compound tri-nitrine tabloids, containing in addition to nitro-glycerine, nitrite of amyl, menthol, and capsicum, constitute a valuable preparation, and will in all probability speedily replace the official formula."

BURROUGHS, WELLCOME & CO.

SNOW HILL, LONDON, E.C.

THE NEWLY DISCOVERED SOLUTION OF COD LIVER OIL.

Not an Emulsion; its constituents are in a condition of more intimate admixture, namely that of Solution.—E. GODWIN CLAYTON, F.C.S.

"The value as a therapeutic agent of an emulsion of cod liver oil and extract of malt has long been recognised, but there are undoubtedly many cases in which patients are quite unable to assimilate such a preparation. Pharmacologists and practical physicians have long desired to obtain a true solution of cod liver oil in malt, but the difficulties in the way of its accomplishment were found to be so great that all attempts to manufacture such a product were temporarily abandoned. The question has, however, at last been solved . . . This new preparation is known as the Kepler Solution of Cod Liver Oil in Malt. . . Its superiority as a therapeutic agent, especially in cases of wasting disease, is obvious."

THE LANCET, May 22nd, 1886, p. 990.

"It has hardly any of the disagreeable *repeats* of the oil. Many could take it easily who cannot take the oil." (*Ibid*). "The taste of the oil is agreeably disguised; its nutritive powers are greatly increased, and it is rendered easy of digestion." (*Ibid*).—BRITISH MEDICAL JOURNAL.

"The most palatable and easily digested of any form for administering cod liver oil."—MEDICAL TIMES AND GAZETTE.

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.

WARRICK BROTHERS, LONDON. TO THE TRADE.

GENTLEMEN,

WE BEG TO INFORM YOU THAT, MR. R. B WARRICK, HAVING RESIGNED HIS INTEREST IN THE ABOVE FIRM TO US, HIS NEPHEW AND SON RESPECTIVELY, WE SHALL CONTINUE TO CARRY IT ON UNDER THE SAME STYLE.

WE TRUST THAT THE PRACTICAL EXPERIENCE OF THE ONE IN ESSENTIAL OILS AND ALL APPERTAINING TO THE PERFUMERY TRADE, THE GENERAL KNOWLEDGE OF DRUGS OF THE OTHER, HIS BEING A PHARMACEUTICAL CHEMIST, AND HIS SIX YEARS' CONNECTION WITH THE FIRM IN LONDON, WILL GIVE YOU THAT CONFIDENCE IN OUR ABILITY TO SERVE YOU WELL, THAT YOU WILL EXTEND TO US THOSE FAVOURS YOU HAVE EXTENDED TO THE FIRM IN THE PAST. WE ARE, GENTLEMEN, FAITHFULLY YOURS,

ARTHUR WARRICK,
FRED. W. WARRICK.

WARRICK BROS., LONDON—Essential Oils, Raw Materials of Perfumery; also Manufacturers of Capsules, Jujubes, Lozenges.

WARRICK FRÈRES, GRASSE and PARIS; Also NEW YORK—84 CHURCH STREET.

INTERNATIONAL HEALTH EXHIBITION, 1884.
THE ONLY GOLD MEDAL FOR A MALTED INFANTS' FOOD.

SAVORY & MOORE'S THE BEST FOOD FOR INFANTS.

USED IN THE ROYAL NURSERIES.

Obtainable everywhere, in Tins, 1/-, 2/-, 5/-, and 10/-.

PAMPHLET POST FREE ON APPLICATION.

A self-digesting food, supplying the highest amount of bone and flesh forming constituents.

"This is an admirable preparation, and I am confident that to it many infants owe their lives."—*Glasgow Medical Journal*, May, 1885.

"A great improvement on the ordinary kinds."—*Lancet*.

"It can be taken when nothing else can."—*Medical Press*.

"The constant employment, by Medical Men, of SAVORY & MOORE'S MALTED FOOD in rearing their own families is itself a sufficient indication of the estimation in which it is held by those who can best judge of its merits."—*Medical Press, &c.*, August 13th, 1884. [3]

The great success of this Food, extensively used in all parts of the world for the last 25 years, and the healthy condition of children fed upon it, is a convincing proof that it perfectly fulfils its object.

SAVORY & MOORE, 143 NEW BOND ST., LONDON, W.



ESTABLISHED 1859.

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

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AND

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For Australasian subscribers the subsidiary journal THE CHEMIST AND
DRUGGIST OF AUSTRALASIA is included.

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THE CHEMISTS' AND DRUGGISTS' DIARY is now in course of preparation, and will be ready for delivery at the usual time. Chemists who have in use any original forms of apparatus for facilitating pharmaceutical processes will oblige by communicating with us.

ADVERTISEMENTS of employers and assistants can now be received by us up to the first post on Friday mornings, and will be inserted in the current week's issue.

SIR HENRY ACLAND'S ADDRESS has been commented on at length by *The Times*, which finds it distinctly fitting that the President of the General Medical Council, who may fairly be described as the official head of the medical profession, should deliver an introductory address to the students of the School of Pharmacy of the Pharmaceutical Society. *The Times* is very complimentary to the Pharmaceutical Society, which "has so far succeeded in its primary object that its members are to be found in every centre of population throughout England, each of them affording to his neighbours a reasonable guarantee of the purity and efficacy of drugs, and of the correct dispensing of prescriptions." The proposal to establish a research laboratory also comes in for warm commendation.

The St. James's Gazette is satirical. It is noted that Sir Henry Acland closed his address with the lines:—

In small proportion we just beauties see,
And in short measures life may perfect be.

"Small proportion" and "short measures" are things that *The St. James's Gazette* does not like to see recommended to chemists and druggists. Besides, we go to those practitioners and their friends of the other branch of the medical profession because we want our lives prolonged, however "perfect" they might be if cut short. Life "in short measures," in fact, is a prescription which we had rather not get "made up" by the Pharmaceutical Society.

BANKERS' SATURDAYS AND MINCING LANE.—We understand that the feeling in the colonial produce trades is not so unanimous against the alteration of the prompt-day as might have been supposed from the adverse resolutions at different public sales which we reported last week. It is said, for instance, that the tea-trade are coming round to the bankers' side on the question; and we are also told that no official communications have passed on the subject between the banking and the commercial interests since 1882, when a circular on the subject of Saturday closing was sent to the principal houses in the produce trade by the bankers' clerks. This circular proved an abortive one.

THE SHOP HOURS REGULATION BILL.—So far as our correspondence indicates the opinion of the trade on this subject, it is evident that "the ayes have it." The promoters of the Bill will no doubt be glad to know that their efforts are so heartily appreciated by chemists, and unless the opposition come out in some force next week we shall take it that the trade's opinion of the Bill is decidedly favourable.

THE BOARD OF TRADE RETURNS, issued on Thursday, show that during September the imports decreased 965,283*l.*, while the exports of British and Irish produce increased 307,311*l.*, compared with the corresponding month of last year. For the first three quarters of the year the imports decreased 23,643,681*l.*, and the exports of British and Irish produce decreased 1,172,261*l.*, compared with the similar period of 1885. The exports of foreign and colonial produce show a decrease of 589,073*l.* for the month of September, and of 1,042,851*l.* for the first three quarters of the year.

THE CHEMIST AND DRUGGIST'S DIARY FOR 1887 is being rapidly prepared. This is the finest publication in the world for advertisements to chemists and druggists, as it is used daily all the year through in many thousands of pharmacies in the United Kingdom and abroad.

THE SOLVAY SODA PROCESS.—It is reported that Mr. Solvay has commenced proceedings in law against a French soda manufacturer, who is alleged to have infringed his patent by manufacturing soda according to an almost identical method, which is said to be simpler than Solvay's process. If, therefore, Solvay should lose his suit, he will probably be subjected to a very severe competition on the part of the French manufacturer.

THE NATIONAL SOCIETY OF AUSTRIAN PHARMACISTS (Oesterreichische Apotheker-Verein) will meet in congress at Vienna on October 10 and the two days following.

DIARY FOR NEXT WEEK.

Tuesday, October 12.

Midland Counties Chemists' Association Annual General Meeting at Birmingham.

Public sales of drysalteries, at the Commercial Sale Rooms, Mincing Lane, at 1 P.M.

Wednesday, October 13.

Royal Microscopical Society, King's College, W.C.—"Trichodina as an endoparasite," "desiccation of rotifers," and "the Abbe-Zeiss new objectives and eyepieces."

Sheffield Pharmaceutical and Chemical Society Conversation (at 7.30 P.M.), presentation of prizes and inaugural address (at 9 P.M.) by Mr. Thomas Greenish, F.R.M.S., &c., Montgomery Hall, New Surrey Street, Sheffield.

Chemists' Assistants' Association, 103 Great Russell Street, London.—President's Inaugural Address, 8.30 P.M.

Public sales of spices, at the Commercial Sale Rooms, Mincing Lane, at noon.

Thursday, October 14.

Public sales of drugs, at the New Corn Exchange, Mark Lane, at 10.30 A.M.

Metropolitan Reports.

A CHEMIST POISONED BY PRUSSIC ACID.—Dr. Danford Thomas held an inquest on September 30 at the Islington Coroner's Court touching the decease of William John Fairbank, aged 23, a chemist and druggist, lately an assistant to Mr. J. H. Reed, 592 Holloway Road, who was found dead in bed last Sunday night. It appeared from the evidence of Mr. Reed that the deceased had been in his employ for the last fourteen months. In the summer he went for his holidays, and on his return said he had over-exerted himself on a tricycle, and had also caught cold in a thunderstorm. Witness called in a medical man, who told him privately that the young gentleman had a dangerous enlargement of the heart, owing to over-exertion. He went home for a few weeks to his father, at 7 Camden Square, Peckham. Lately he returned to his duties, and on Sunday afternoon dined and took tea with Mr. Reed. In the evening he was discovered dead in bed. Police-constable Simpson deposed to finding a bottle of prussic acid on the mantel-shelf. Dr. Edwards, of Holloway Road, said he had made a post-mortem examination, and could only believe that death had ensued from an overdose of prussic acid. Mr. Reed said that the prussic acid had been used by the deceased for the purpose of poisoning a neighbour's cat on the afternoon of his death; also that deceased had been taking a mixture containing bismuth and prussic acid for indigestion. The coroner said there was no doubt the man died from prussic acid poisoning, but there was no evidence how it was taken, or for what purpose: and the jury returned a verdict in accordance with this latter opinion.

PROSECUTION OF A CHEMICAL BROKER.—At the Mansion House on Tuesday, Mr. John Angus, a chemical broker, and Mr. Stephen Raphaelovitch, his manager, attended before Alderman Sir Andrew Lusk on a summons, at the instance of Messrs. Forbes, Abbott & Leonard, manufacturing chemists, of Ingram House, Fenchurch Street, charging them with having, on or about April 8 last, conspired to obtain and obtained seven bills of exchange of the value of 5,500*l.*, by false pretences with intent to defraud. The defendants pleaded "Not guilty." Mr. Wontner, solicitor, prosecuted; Mr. Willis, Q.C., appeared for the defendants. Mr. Wontner, in opening the case, said the prosecutors took the proceedings with great reluctance, as they and the defendants had carried on their respective businesses in the same house, and they had been on friendly terms. The defendant, Mr. Angus, was a chemical broker, and the prosecutors were, it was alleged, induced recently by him and his manager to enter into certain transactions of a speculative character, which the defendants undertook to manage for them. Prior to Christmas last the defendants informed the prosecutors that they had certain cargoes of nitrate of soda coming to this country, and they suggested to them, as the price of nitrate of soda was likely to rise, that they should buy a cargo averaging 1,600 tons with a view to selling the commodity again at a profit. Messrs. Forbes eventually agreed to buy the cargo of a ship called the *Aberystwith Castle*, consisting of 1,600 tons of nitrate of soda, for 14,800*l.* The defendants were to receive a brokerage of $\frac{1}{2}$ per cent. on the transactions of purchase and sale. A large portion of the cargo would, they represented, be sold before arrival, and delivered to the purchasers over the ship's side, and the firm would receive the money. The other part of the consignment was to be warehoused at Leith and the warrants were to be lodged, in the name of Messrs. Forbes, with Messrs. Angus's bankers, for them to make an advance at the rate of 7*l.* per ton on the cargo. The balance was to be provided for by bills to be given by Messrs. Forbes, who, in pursuance of this arrangement, gave acceptances to the amount of 5,500*l.* Later on the defendants' firm got into difficulties and the bankers disowned all knowledge of Messrs. Forbes in the transaction, the advances having, as they asserted, been made by them to Messrs. Angus as principals and not as brokers. The bulk of Messrs. Forbes's acceptances had been passed away to others and had been met. In these circumstances the present proceedings were instituted. On the part of the defendants it was alleged that all that took place between them and the prosecutors were regular business transactions, and that no dispute would have arisen if the article had not dropped consider-

ably in value. Some evidence having been given in support of the charge, Sir Andrew Lusk adjourned the further hearing of the case till Friday, and accepted the defendants' personal undertaking then to attend, Mr. Willis, Q.C., stating that they had a complete answer to the charge, and that there had been no breach of faith in the matter.

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.

BIRMINGHAM.

DIARRHOEA MIXTURE.—An inquest was held on Sept. 30 by the borough coroner (Mr. Hawkes) on the body of Alice Harvey, fourteen months, whose parents live in Stour Street. Deceased had suffered very much from illness since her birth. On Saturday last diarrhoea appeared, and 3*d.* worth of diarrhoea mixture was purchased from a chemist in the neighbourhood. This, to use the father's own words, "cheered" the patient, but death ensued on Tuesday. Mr. Chesshire said he was called to see the deceased. It was a hopeless case. The child was sinking fast from exhaustion from diarrhoea. Mr. Hawkes said it was to be regretted that a doctor was not called in before. But he was pleased to say the summer was now over, and these cases would consequently greatly diminish. A verdict of "Death from natural causes" was returned.

IRELAND.

PHARMACY ACT.—On October 2, a firm trading as Cregan Minors, Navan, were prosecuted at the Navan Petty Sessions for contravention of the Pharmacy Act of Ireland. The prosecution was conducted by Mr. Sullivan on behalf of the Pharmaceutical Society of Ireland, while Mr. Counsel, B.L., represented the defendants. The summons was taken out against Messrs. Foley & Smith, who carry on the business of the firm in question. Mr. William H. Ashe, who is in the employ of the Pharmaceutical Society of Ireland, deposed that he made a purchase of corrosive sublimate at the establishment of the defendants, who are not registered chemists. The drug was supplied to him by Mr. Gateley, the manager of the business, to whom the purchaser was unknown, and the packet did not bear a proper label, as prescribed in the Act. On behalf of the defendants, Mr. Counsel contended that Smith and Foley, the parties summoned, were not the proprietors of the business, but simply carried on the concern for the real owners, who are minors, and under the guardianship of the Court of Chancery. After considerable discussion the Bench decided to dismiss the case without prejudice, as the proper party had not been summoned, and declined to assist by giving any opinion as to who is the responsible person. Costs were allowed against the Pharmaceutical Society. The Society are at present endeavouring to find out the responsible parties, and, if successful, will, it is thought, take further steps in the matter.

LEEDS.

THE ELECTRIC LIGHTING SYSTEM is being rapidly pushed forward in Leeds, and apparently with good results. The new building of Messrs. Goodall, Backhouse & Co., White Horse Street, Boar Lane, has been furnished with the electric incandescent lamps, as also have several parts of the old building. The installation consists of one of Crompton's compound self-regulating dynamos, and some 300 16-candle power Edison-Swan incandescent lamps of 110 volts each. The electrical work has been carried out by Mr. Wilson Hartnell, consulting engineer, Leeds.

LEICESTER.

GREAT FIRE—DANGER OF A DRUG WAREHOUSE.—On Friday, October 1, an alarming fire occurred in Belvoir Street, whereby damage to the extent of 100,000*l.* was

incurred. At one time the premises of Messrs. Clarke, Nettleship & Bailey, wholesale druggists, which are situated in the neighbourhood, were seriously threatened, and as the firm holds a large stock of oil and drugs, considerable alarm prevailed until the house was out of danger.

LIVERPOOL.

LIVERPOOL CHEMISTS' ASSOCIATION.—The annual meeting of the Liverpool Chemists' Association was held on September 30 at the Royal Institution, Mr. A. H. Samuels, vice-president, in the absence through indisposition of the president, occupying the chair. The annual report, which was adopted, showed that there are eighty-six members of the society and seven associate members, being an increase of nine on the session. The treasurer's statement showed a debit balance of 15*l.* 7*s.* Mr. A. C. Abraham was re-elected president, and the retiring members of the council were re-appointed.

WOMEN AS DISPENSERS.—Several letters have appeared in recent issues of the *Liverpool Evening Echo* on the subject of "Woman's Rights." In one the writer (R. Rentoul) advocated that *women should be employed at hospitals and dispensaries*. A woman is in anything exact. A few months ago a prescription was sent to fifty West-end dispensing establishments, and in seventeen cases it was inaccurately made up. In reply to this statement Mr. C. Symes, local secretary of the Pharmaceutical Society, stated that for some years past the same facilities have been given to women as to men for studying at the School of Pharmacy, and for passing the examinations, and as a result some one or two do so. The other statement, Mr. Symes added, is misleading, and calculated to operate to the prejudice of a respectable and careful section of the community. The prescription in question was taken to stores, doctors' shops, and druggists in the poorer neighbourhoods of London, and of the seventeen inaccuracies complained of only two could be attributed to the latter body of men, leaving fifteen to be divided between the stores and open surgeries. Another letter to the same effect was published, signed by "Acid Tart."

ENCOURAGING TRADE REPORT.—Messrs. Evans, Sons & Co., of Liverpool, Manchester, and Birmingham, in their monthly price current, state that at length the continued depression in general trade seems to be much lessened, and there are not wanting signs that the turning point has been reached, and that we may look for better things for English commerce in the future. There has been a sharp advance in some great staples.

THE IMLACH CASE: STRANGE SEQUEL.—In the Liverpool County Court, on Saturday, Mr. Registrar Bellringer granted a receiving order in the matter of John Casey, labourer, 234 Beaufort Street, Toxteth Park, the petitioning creditor being Dr. Francis Imlach. At the recent Liverpool Assizes, Casey and his wife were the plaintiffs in an action for damages, the allegation being that Dr. Imlach performed an unnecessary and improper operation upon Mrs. Casey, without her consent and that of her husband. The case was tried before Mr. Justice Cave and a jury, and a verdict was given for the defendant with costs. We understand that the present proceedings have been taken owing to the non-payment of the costs.

MANCHESTER.

ROYAL JUBILEE EXHIBITION, 1887.—The Executive Committee of the exhibition have issued their prospectus and regulations for exhibitors. The prospectus states that, in order to fittingly commemorate the jubilee year of Her Majesty's reign, it has been decided to hold an exhibition under the above title in the city of Manchester, from May to October, 1887. The object of the exhibition will be to illustrate, as fully as possible, the progress made in the development of arts and manufactures during the Victorian era.

Applications for space must be lodged on or before November 1. No exhibits will be received before March 15, 1887, except by special permission, and all goods must be delivered before April 15, and be in order by April 25, 1887. The general charge for space will be 2*s.* 6*d.* per square foot, the minimum charge being 2*l.* 10*s.*, paying on allotment.

Under certain restrictions exhibitors will be permitted to receive orders for their goods in the exhibition. We understand that the electric lighting of the buildings and gardens will form a special feature of the exhibition. Arrangements are being made for the lighting of fairy fountains in the gardens on a scale at least equal to the display at the Colonial and Indian Exhibition, which has attracted so much attention during the present season.

FIRE.—A serious fire took place on Tuesday last at the chemical works of Messrs. Roberts, Dale & Co., Cornbrook. The fire is supposed to have arisen from spontaneous combustion. The fire brigade of the firm and the Manchester Fire Brigade, after working two hours, got the mastery of the fire, which undoubtedly would have been very serious but for their prompt action. The damage to property is covered by insurance. Three men were severely injured.

NOTTINGHAM.

NOTTINGHAM AND NOTTS CHEMISTS' ASSOCIATION.—On the evening of October 1 the associates of the above Society held their annual soiree in the rooms of the Sunday School Union Institute, Shakespeare Street. A majority of the young men were present to do justice to the good things provided, both for mind and body. The Council was represented by Mr. Councillor Fitzhugh, J.P., president, and Mr. A. Middleton, hon. secretary. Various specimens of interest to the trade of the chemist were exhibited, amongst them being those kindly lent by Professor Flowers and Professor Blake, and by Messrs. W. Widdowson and A. Rogers. The president announced that arrangements had been made for a class in botany to be held at the University College, and also gave particulars of the Friday evening class for the associates at their rooms for the study of the British Pharmacopoeia. A pleasant evening was concluded at a late hour.

PLYMOUTH.

SUDDEN DEATH OF A CHEMIST.—The Plymouth borough coroner held an inquest on September 30 on the body of Mr. Richard Morrison Bennett, chemist and druggist, of 14 Union Street, Plymouth. It appeared from the evidence that the deceased was found dead in bed early that morning. Arthur Bennett, son of the deceased, identified the body, and said the servant came to him that morning and told him that his father was either faint or dead. He went to his father's room and believed him to be dead, and he immediately went for Dr. White, who gave it as his opinion that Mr. Bennett had been dead some three or four hours. The deceased had been in a very precarious condition for a considerable time. Five or six years ago the deceased had a distinct paralytic stroke, and he had had several slight attacks since. It was stated that the deceased gentleman was in the habit of staying up late at night making up his books and attending to his correspondence. He was seen after midnight on Wednesday and appeared in his usual health, and Dr. White said he had no doubt deceased had died from apoplexy. A verdict was returned in accordance with this testimony. Mr. Bennett was a highly respected townsman and had carried on his business in Union Street for many years, and up to the time of his death was local correspondent of the *Era*. The jury, in returning their verdict, passed a vote of condolence with the bereaved family.

Mr. J. FINDLAY, of King Street, Plymouth, has purchased the business of Mr. B. J. Kent, Duke Street, Devonport.

Mr. G. T. STARKEY, chemist, 55 Cobourg Street, Plymouth, and Sergeant 2nd (Prince of Wales's) Volunteer Battalion, Devonshire Regiment, won the silver challenge cup, value 25*l.*, given by Sir Massey Lopes, Bart., at the annual shooting at Mount Batten, September 29. This is the second time he has gained the cup, having won it in 1882.

ERRATUM.—In an advertisement of a chemist's dispensing counter, manufactured by Messrs. Bowling & Gowler, of Gun Street, Brushfield Street, Bishopsgate, which was published in this Journal on September 18, we printed the price as 21*l.* It should have been given as 12*l.*

Pharmaceutical Society of Great Britain.

COUNCIL MEETING.

THE Council met at 17 Bloomsbury Square on Wednesday morning shortly after eleven. All members except Mr. Hampson were present, Mr. Carteighe, president, in the chair. The minutes of the August meeting were read and confirmed.

The VICE-PRESIDENT desired to express his regret that, as a member of the Council, he had been unable to attend the meeting of the Pharmaceutical Conference at Birmingham.

LETTERS OF THANKS

were read by the President from Mr. Edwards, honorary secretary of the Leicester and Leicestershire Chemists' Association [for a grant of 25*l.*]; from Mr. Joseph Ince [on his appointment as lecturer in pharmacy]; and from Mr. Baden Benger for the flattering resolution which was passed at the last meeting on the occasion of his retirement from the Board of Examiners.

ELECTIONS AND RESTORATIONS.

Several persons were restored to their former position in the Society on payment of the current year's subscription and a minimum fine.

Several chemists and druggists were then appointed associates and associates in business of the Society, and a large number of students were also elected.

The following persons were restored to the register of Chemists and Druggists on payment of a fine:—William Fletcher, 20 Lilac Terrace, Regent Street; Abraham Dale Jones, 19 Neepsend Lane, Sheffield; Charles Henry Tucker, 101 Stamford Street, Ashton-under-Lyne.

APPOINTMENT OF AN EXAMINER.

The PRESIDENT intimated that the next business was the appointment of an examiner in room of Mr. Baden Benger, and that the relative qualifications of the candidates would be considered *in camera*. Our reporter was requested to retire. On resuming it was moved and unanimously agreed

That Mr. Francis Ransom, of Hitchin, be appointed a member of the Board of Examiners for England and Wales, in room of Mr. Benger, retired.

FINANCE.

The report of the Finance Committee was then read. The report referred entirely to the receipts and disbursements during August and September, which were not of an extraordinary character. The PRESIDENT, in moving the adoption of the report, explained several minor matters, and the motion was adopted, as was also a motion for the payment of the first moiety of the annual allowance to the Bell scholars.

BENEVOLENT FUND.

The report of the Committee was read by the Secretary, and included recommendations for relief amounting to 80*l.*, viz., one of 15*l.*, four of 10*l.* each, and five of 5*l.* One application was not entertained. The report also contained the following statement and recommendation regarding annuitants:—

It was recommended that six annuitants more be elected in December, thus making up the total number of annuitants to 52. The seven candidates who were left over at the last election, and three who have since been placed on the provisional list, are eligible for election. These are:—

Chenery, Kate K. M.	Goadsby, Elizabeth
Fife, George	*Horncastle, Ann
*Morris, Mary.	Sowter, Emily Sarah.
Pownall, Lydia Sarah.	Spendlow, Richard W.
Rossiter, Anne II.	*Stone, Thomas William.

[Those marked with an asterisk have been placed on the list since last election.]

After the election in December 1885 there were forty-nine annuitants on the list. Three have since died, leaving forty-six on the list. The account stands as follows:—

Expenditure.

	£	s.	d.	£	s.	d.
39 receiving £35 per annum	1,365	0	0			
7 „ £30 „	210	0	0			
				1,575	0	0

	1885	1886
	£ s. d.	£ s. d.
Grants: Jan. to Aug. (inclusive)	385 0 0	405 0 0
„ made in October	60 0 0	80 0 0
		485 0 0
Total	445 0 0	2,060 0 0

Income.

	1885	1886
	£ s. d.	£ s. d.
Receipts: Jan. to Sept. (inclusive)		
Subscriptions	1,320 1 5	1,320 18 5
Donations	299 5 0	13 13 0
Legacies	300 0 0	140 0 0
Interest on investments	577 8 9	666 18 4
Total	2,556 15 2	2,141 9 9

The VICE-PRESIDENT, in moving the adoption of the report said, that the income this year, exclusive of legacies and donations, was a little more than it amounted to at a corresponding period last year, viz. 1,957*l.* in 1885, and 1,986*l.* in 1886, but this year there was a large increase in the interest on investments, while subscriptions had actually fallen off. He regretted this very much, and trusted that before the end of the year the falling-off would be made up. All the cases for relief had been carefully gone into, and were most deserving of relief. (While explanation of the cases was given, the Council went into committee.) On resuming the Vice-President referred to the satisfactory progress which was being made in the election of annuitants. Another six would, he thought, leave only a very small balance, but he trusted that benevolence would make the balance larger. Speaking of the candidates who had been placed on the list, he remarked that Mrs. Morris's was a special case: she was sorely afflicted and was in a state of great distress. He trusted that she would ere long be an annuitant.

Dr. SYMES remarked that he did not wish by any means to deprecate the kindly remarks which had fallen from the Vice-President regarding Mrs. Morris, but he did not think that one candidate should be mentioned any more than another. The Council had no special sympathy with any one of the candidates.

The PRESIDENT explained that the remarks of the Vice-President were intended to show that all three additional cases were of a deserving nature. He reminded the members that it was the custom in the election that members of Council should show their disinterestedness by refusing to place their names on the ears of any of the candidates, lest a false impression might be conveyed.

Mr. BOTTLE supported the recommendation to elect another six annuitants. He rejoiced that the condition of the funds enabled them to achieve such important progress. They would now have a larger number of annuitants than ever before, larger even than was ever anticipated; at the same time he regretted that there was so much distress in pharmacy. He also regretted that there were so many cases for casual relief, especially from non-members or outsiders of the Society. Of these there were six this month. He thought that outsiders should do a great deal more for the fund, seeing that they got so much benefit from it.

Mr. RICHARDSON would be sorry that it should go forth that they were in a good position, when the fact of the matter was that they were going back so far as subscriptions were concerned. This was a fund for which they looked for help to the rank and file of the trade, but they did not receive the support that was expected. He trusted that next year the increase would be such that this appeal would not have to be repeated. The outsiders ought to support the fund more; it was they who always appealed for help, and if they did not show up better with subscriptions the Society would have to consider whether they could entertain the applications of outsiders. He was glad that there were to be more annuitants. This was the richest and best part of their benevolence, and deserved to be greatly encouraged.

Before sitting down there was another matter to which he would draw attention, viz. that many of the subjects for casual relief were bordering on the workhouse, and it was a question whether they did any good by allowing little sums to filter out to them. If they had more half-crown subscriptions they could do more good and give greater relief, and it was for such that he appealed.

Mr. ATKINS said that it would appear from the report that they were working out to the end of their tether; but he was not sorry for that: they could not do better than go to the country with a good record of work done—most made of what had been received. He referred to the benevolent fund dinner to be held next year, when a special appeal would be made, and trusted that meanwhile benevolent pharmacists would remember them in their wills. (Laughter.)

Mr. ALLEN protested against the use of the name outsider in reference to the benevolent fund. (Hear, hear.) There were no outsiders in the matter; here it was that those who were connected with the Society and those who were not could meet on neutral ground; and he hoped that it would continue so. He considered that Mr. Richardson's remark was unfortunate, for, as the President had frequently remarked, the fund was notable for the catholicity of its administration.

Mr. ROBBINS was pleased, and said that he could remember when there were only fourteen annuitants, and he considered it most satisfactory that through the course of time the number had increased to fifty-two. The fund then amounted to 14,000*l.*, now it was 20,000*l.*, and yet far more money had been given away. That was encouraging for the future, he thought. He had not given up the idea of the 50*l.* a year, or 1*l.* a week annuities. Some considered that the scheme was of the nature of an insurance fund. He failed to see that. Most of the people who subscribed a guinea a year would never come back upon the fund, whereas the appeal could be made to those who did not support the fund, "If you give us 5*s.* a year, it will tell in your favour should you ever come to want."

Dr. SYMES admired Mr. Robbins's pertinacity, but, he put it plainly, was it not better to have fifty annuitants at 30*l.* than thirty at 50*l.*? It was no doubt a very good thing to give a man 1*l.* a week, but their object was to relieve as many as possible from want, not to try to make a few very comfortable.

Mr. ROBBINS said that Dr. Symes had quite mistaken his idea, which really would bring in more money because his scheme offered greater inducements.

Mr. CROSS said that he was particularly pleased to see this record of how the fund was administered, because he feared that much of the want of interest in it was due to the fact that it was not sufficiently well known. He trusted that the report of the discussion would be widely and sympathetically read. He as a local secretary had experienced the want of interest taken in the fund. Even some connected with the Society did not appear to read about it. Of course the excuse was always made that times were bad and money scarce, but that surely would not prevent a man giving 5*s.* to this fund. He wished to say as publicly as it could be said that it was every man's duty to give something. Local secretaries could do much to help it on if they would only try to send up more money for the Benevolent Fund than they did for the Society. He could not quite understand Mr. Robbins's argument; he was sure, at all events, that his proposal would never bring in those who would not otherwise subscribe. Of that he was sure, from the experience he had had in collecting. He quite agreed with Dr. Symes.

Mr. RICHARDSON explained that in using the word outsiders he meant that class of persons who were, or said they were, proud of being outsiders. (Oh, oh.)

Mr. SOUTHALL said that he was particularly pleased to see that the fund was so well distributed. He would like to point out that there was another class to whom appeal should be made. Why not call upon the rich men? They were really more able to give support to benevolent objects than the class of men who could only afford to give a half-crown subscription, and he pointed out it would be much cheaper and easier to collect from the rich. He trusted that they would have much more liberal subscriptions from the rich men connected with pharmacy.

The PRESIDENT in summing up the discussion said that the general idea seemed to be to get the number of subscribers increased, just as they were constantly adding to the number of beneficiaries. One of the things which prevented the fund becoming more popular was the manner in which it was referred to by the press. For instance, it was spoken of as the Pharmaceutical Benevolent Fund—unfortunately, but naturally enough, owing to its association with the Society. It was really a fund for the whole trade, not for any class in particular, and it would be much better if it were spoken of as *The Chemists and Druggists' Benevolent Fund*. (Hear, hear.)

The report was agreed to.

GENERAL PURPOSES COMMITTEE.

The report of this Committee was heard *in camera*. On resuming, the PRESIDENT referred to the more important matters in it. There was an unusually large number of cases of infringement of the Pharmacy Act reported upon by the Solicitor, and in several of these convictions had been obtained; others were making progress. Then a communication had been received from the Privy Council, accompanying a copy of a recommendation, made by a Coroner's jury in Kent, that laudanum should be placed on Part I of the Poisons Schedule. This the Committee considered undesirable, and he was instructed to send a reply to the letter. If laudanum were put in the first part the law would be broken every day. Then the Scottish memorial had been carefully considered, worked at, and progress made. The question was distinctly complicated, and, owing to the committee for its consideration being composed of the whole Council, it progressed somewhat slowly. But he hoped that by next month, when it would come before the Council, that it would be settled.

Mr. GREENISH hoped that the President in framing his reply to the Privy Council would make it such that the whole Council would go with him. It might have been better for a small committee to draft the reply, so as to relieve the President from the responsibility.

Mr. WILLIAMS agreed with this. He was also glad that the business relating to the North British branch had been delayed for a month, for he had distinct views on the subject, and he would be able to give expression to them next month.

Mr. BORLAND said there was a point regarding the letter from the Privy Council which he could not let pass. The President had said that if laudanum were put in the first part the law would be broken every day. This was rather disrespectful to chemists and druggists, who were the only persons who could sell laudanum. He trusted that would not be put in the letter.

Mr. ATKINS presumed that the President did not mean that, and he thought that it would be better that the President should be relieved from the responsibility by putting the matter in the hands of a committee.

The PRESIDENT said that there was no necessity for taking the matter so seriously; the letter was merely a formal one, and all that it required was a plain answer without entering into reasons. In committee some members thought a little introduction was necessary, and that was agreed to.

Mr. WILLIAMS considered that a letter drawn up by the Library Committee carried greater weight with it than one from the President, to which the PRESIDENT replied that it was considered by a committee—the largest and most important committee which the Council could appoint—and Mr. Williams's remarks were quite out of order. What had the Library Committee to do with the matter more than any other one?

The report was then adopted.

EXAMINATION ETHICS.

Dr. SYMES then said that a motion in his name stood on the agenda paper, which read as follows:—

That candidates for the preliminary examination who fail to pass may, on application to the secretary, be informed of the position they attained in such examination.

This was a matter of considerable interest which had been discussed at various times, and he was desirous that some decision should be arrived at regarding it. He had left out the Minor in the present motion, because he understood that

the Boards of Examiners had discretionary power in that examination, whereas the manner in which the reports of the Preliminary examination were received precluded such power. After a conversation with the President, he was inclined to defer his motion in order that the Boards might have an opportunity of considering the matter, if it was thought that this would be a more advisable course. It would be understood, however, that he would not allow the matter to be shelved—merely that he was willing not to push it forward that day.

The PRESIDENT said that his objection to the motion was that it touched upon a part only of the examination regulations. There were other difficulties in the matter which were not quite appreciated. The subject had been considered before, and would be again; and, to his mind, the same conclusion might always be arrived at. If they would only look into it, they would see that a man might receive an entirely false impression from the information which would be given to him. There were three subjects in the examination. If he passed in two and got a round O in one, there was no doubt that he had failed in that subject. But if he took only a pass number of marks in that whole, and so failed to reach the aggregate, what subject did he fail in? He failed in the whole. Then, if they told a man that he failed in any particular subject, they know from experience that he got up that subject and neglected the rest.

Dr. SYMES here said that he did not like to call the President to order, but he was discussing the subject, and if that was to continue it would be better to put the motion so that both sides of the question be heard. He was quite prepared to answer all that had been said at the proper time.

The PRESIDENT explained that he was merely pointing out the difficulties in the way.

After some conversation as to whether the motion should be put,

Mr. WILLIAMS pointed out that there was no such thing as the preliminary examination. They had no legal power to impose such an examination. It was the first part of the Minor, and it was his opinion that the motion would involve a much wider question.

Following this was a lengthened and desultory discussion as to how the Boards of Examiners would receive the matter, and as to whether, if the Boards expressed their opinion on the matter, it would be according to etiquette for the Council to discuss the resolutions arrived at by the Boards. Mr. HILLS suggested that Dr. Symes should withdraw his motion then, and give notice of it for next meeting, when it could be considered. Mr. SCHACHT wanted the motion to be put and discussed there and then, but the PRESIDENT hoped it would not be: it would be done better afterwards when the Examiners reported—gave statistics and the like. Dr. SYMES agreed to withdraw his original motion, and to submit another which would cover the whole of the examinations; and Mr. BAILDON, who had agreed to second the motion, withdrew his support, and submitted the original motion, slightly altered verbally. After considerable delay, owing to the expression of varied opinion,

Dr. SYMES moved—

That this Council requests the Boards of Examiners to consider the desirability of informing unsuccessful candidates for examination, upon application, of the position which they have obtained in the examination.

Mr. ATKINS seconded the motion and expressed the opinion that the examiners, as experts, were best qualified to give a decision.

Mr. BAILDON then moved—

That the Boards of Examiners be requested to consider the feasibility of informing, upon application, unsuccessful candidates for the first, or preliminary, examination, of the position which they have obtained in that examination.

Mr. BORLAND seconded this, and after a little delay, during which it was considered whether Mr. Baidon's resolution was a proper amendment or not, it was put to the vote. Mr. HILLS declaring that he would not vote, because no arguments for either of the motions had been laid before the meeting. The result of the vote showed, for Mr. Baidon's amendment, 6 (Dr. Symes voting for it), for Dr. Symes's

motion, 8. The former was declared lost, and before the latter was put to the meeting as a substantive motion, Mr. WILLIAMS appealed to the members to vote against it, in order that time might be got to consider it. The motion was, however, put. Eight voted for it and 6 against it, and it was declared carried; while Mr. HILLS pointed out that only a little more than half of the Council had taken part in the voting.

It was intimated that Mr. Charles Forbes Wattie, of Bellabeg, Strathdon, N.B., had made the statutory declaration that he was in business before the passing of the Pharmacy Act, 1868, and had been placed on the register of chemists and druggists.

This being all the business, the meeting adjourned.

OPENING OF THE SESSION.

The usual inaugural meeting of the present session was held in the lecture-hall of the Society's house on Wednesday evening at 8.30 p.m., Mr. Carteighe, Vice-President of the Society, in the chair. The hall and platform were gaily decorated with hothouse plants. The sitting accommodation provided was taxed to the utmost; several ladies were present.

The PRESIDENT, on proceeding to the platform, accompanied by Sir Henry Acland, was received with loud cheers. Mr. Carteighe at once intimated the order of the proceedings and called upon the professors to give an account of their classes during the session.

SPEECHES BY PROFESSORS.

Professor BENTLEY said he received his brief from the President, and that brief was, to be brief (laughter); and therefore, as an old disciplinarian, he hoped he should adopt what the President had desired him to do. The President did not expect change from him in his address at this meeting; it could not be expected that he should make any change; neither did he think it desirable that he should have to endure change; therefore he should only say that which he had uniformly said for nearly forty years, that the students entrusted to his care had been excellent and satisfactory in every way. (Cheers.) With these very few remarks he passed to the honours men. There were three examinations—two for five months' course men, and the other for sessional men. The first examination, that at the end of the session, was in every degree satisfactory. There were seventeen candidates for the prizes, and of those seventeen five were particularly marked out for honorary distinction. Six were very creditably distinguished, and all passed creditably. (Cheers.) The bronze medal was obtained to Mr. Want, and amongst the certificates awarded was one to Miss Buchanan. (Loud cheers.) That was one of the changes with which, although an old Conservative, he was very pleased (Cheers)—his having to announce a lady as receiving one certificate. They would hear of her again presently as receiving a second. For the prizes of the second course those who distinguished themselves in that class were Mr. Davies, who obtained the bronze medal, and the certificate of merit Mr. Richard Wilson. With regard to the sessional men, the silver medal went to Mr. Baker and Mr. Lewis Walter Hawkins. Those two gentlemen were equal—one examination was *viva voce* and the other was by motto—they were both equal; and he hoped, on future occasions, if there were others equal, the Council would show their appreciation of the merits of the candidates by giving them all silver medals. (Laughter and cheers.) It was a great pleasure to him to state that the silver medal to Mr. Baker was one that he not only thoroughly deserved, but it was also a pleasure to him to find it was taken by one who bore a distinguished name. There was no practical botanist—no one who had any knowledge at all of botany—who did not know Mr. Baker of Kew, and it was highly satisfactory to think that as the father so the son proceeded. (Applause.) Then certificates of honour were given to Mr. Want and Mr. Davies; certificates of merit, Mr. Wilson, Mr. Tingle, Miss Buchanan, Mr. Hodder, and Mr. Birkett; all those ladies and gentlemen very honourably deserved those distinctions which at his recommendation the Council awarded them. (Applause.)

Professor ATTFIELD, who was next called upon, said at the end of the session he had the honour of reporting to the Council, in very considerable detail, as to the proceedings in the class of practical chemistry for the year, and he therefore now need only, as usual, just give an outline of the statistics and the results he then presented to the Council, for he found that every year he was looked to at this meeting to state what sort of classes they had had, comparing each session with its previous session. Last year they had seventy students working during the ten months, as against sixty-seven the previous session, and the average period of work was nearly six months—5.83, as against 5.66 the previous session—each student working on an average over three and a half hours daily. As to the number of students working ten, nine, or eight months, nineteen students entered for the complete session of ten months, eighteen for a nine months' course, and the others for various periods. One feature of the entries was that fifty entered during October—a largish number compared with the first period, or the first month, of the session. Last year the professors adopted a plan similar to that carried out for the last four or five years, of having tutorial classes or educational examinations, at which he gathered seven or eight—at most nine—of the students, and examined them on the subjects they had been learning in the laboratory, in order that he might be sure, not only that they possessed all the knowledge in the exercises they were designed to give, but also that they might have this knowledge in a logical form, and when they came to their examination that they might have it in a producible form. The interest in them was maintained to the last, and from his own point of view as a professor they were perfectly satisfactory (Cheers.) Respecting the results at the end of the session, out of the possible number of marks Mr. Hawkins obtained 92, Mr. Baker, whose name has been specially alluded to by Prof. Bentley, 90, Mr. Wilson 89, Mr. Tingle 79, Mr. Johnson 72, Mr. Lupton 70, Mr. Grimwade, 62, and to these gentlemen the Council awarded silver and bronze medals, and certificates of honour and merit, which would be presented presently. He had only to say respecting the conduct, the attention, and the diligence of the class, they were perfectly satisfactory. If he had any complaint whatever to make of the students of the Pharmaceutical Society it was not as regarded their work in the building, but that in his estimation they did not take enough outdoor exercise and recreation. (Applause.) That was rather a serious thing, he as a professor thought, because he found that those who joined a football club or a cricket club did best, and got on best in their examinations afterwards. (Cheers.) All the professors endeavoured to encourage the students to follow outdoor exercise. The President now in the chair was president of the cricket club, and he (Prof. Attfield) was president of the football club, and although he found it impossible at the age of fifty to do what he did practically at football at twenty-five, he did what he could—he kept the students together from year to year; but still the football club, although fairly well supported, was not supported so well as he could wish. The cricket club, he hoped, would be well supported. He was confident as a professor and a teacher, if the students attended to these recreations more than they did, they would pass their examinations with greater credit. (Cheers.)

Professor DUNSTAN said he had much pleasure in stating in his first report that the papers sent in for the silver medal showed a decided improvement on the preceding year. He stated to the Council that Mr. Tingle, to whom the silver medal was awarded, wrote one of the best papers he had read in this Institution. (Cheers.) In fact the session was marked by the presence of more than one student of exceptional ability, and he was glad to think that these men, who were so ready to go on to original investigation in pharmacy, should have encouragement from this Society to do so. (Hear, hear.) It was well he should remind them on the connection between advanced pharmaceutical education and original investigation, that it should include a proper method of technical education. First show the students the principles of the science, and then show them how to apply those principles. (Hear, hear.) But the application could only be learned by original investigation. (Hear, hear.) This scheme of education the Society have very wisely decided to complete, and he had no doubt the result would be the further advancement of scientific pharmacy by a well-trained body of scientific men who were also pharmacists. He did

not wish it to be thought for a moment that he was dissatisfied with the students of this Society. What they did they did very creditably; indeed he was inclined to support Professor Attfield in his remarks that the students worked too hard, and did not take sufficient recreation. But however high the lecturer might place his standard, the standard of the student was an examinational standard. (Hear, hear.) He had nothing to say against this as far as it went; he was very glad when it took possession of the student's mind, but when he could see no further, and it stuck there, the effect on the mind must be very demoralising. This was the danger to which the students were exposed, and it was the danger which the Council intended to do its best to avert. (Cheers.) He had now only to read the names of those on whom the Council had bestowed honours in the chemistry and physic course. The bronze medal was awarded to Mr. Wilson, the certificates to Mr. Wilson and Mr. Ridley. At the end of the session of two courses the silver medal was awarded to Mr. Tingle. He had no doubt they would hear of Mr. Tingle doing most excellent work in connection with pharmacy. (Hear, hear.) Then the certificates of honour had been awarded to Mr. Want, Mr. E. G. Baker (who came forward in chemistry); also Mr. Hawkins, Mr. Wilson, and a certificate of merit to Mr. John Wm. Bostock.

Mr. CARTEIGHE then distributed the prizes to the successful students, each one who came up to the table being received with cheers. A special and prolonged round of applause was given when Miss Buchanan's name was called, but the lady was not present.

THE HERBARIUM PRIZE.

The PRESIDENT said this prize was given to those who could manage to collect within a certain number of months a series of plants, name them, dry them, and present them to the examiner in a way that should be creditable to the young botanist. He would call on Professor Bentley to state what the result was in this subject.

Professor BENTLEY said that botany, being the leading science in this Society, always came to the front. He had great pleasure in stating very briefly that there were two excellent collections sent in this year. Do not suppose because he was brief that he underestimated the value of their herbarium prizes. He did not think that any prizes given in this institution were more valuable to the student than the prizes for practical botany under the name of the "Herbarium Prize." Therefore those students who obtained those prizes were admirably deserving of them. The first prize—the silver medal—was given to Mr. Lockyer. It was a prize well worth having, as the practical botanist would perceive that the very demerits of his collection indicated its merits. The collection made by Mr. Lockyer showed that he was perfectly honest in his work. That, he conceived, was the greatest praise he could give, and he did it with very great pleasure. He had said on many occasions previously that those who got the herbarium prizes came forward afterwards as scientific and practical pharmacists. With regard to the second collection, all he should say was that Mr. Gartside very well deserved the bronze medal which the Council had awarded him at his (Professor Bentley's) recommendation, and he felt satisfied that he also would come to the front in the future as a thoroughly scientific and practical pharmacist. (Cheers.)

The PRESIDENT then handed the prizes to Mr. Lockyer and Mr. Gartside.

COUNCIL EXAMINATION PRIZES.

The PRESIDENT said the first of these prizes was given in honour to the late Jonathan Pereira, and the second and third by the Council of this Society, to encourage the study of *materia medica* throughout the country, no matter whether the students obtained their knowledge in this school or elsewhere. He called on Mr. Gale to state the results in this branch of study.

Mr. GALE had nothing to say beyond this, that the Pereira medal was the blue ribbon of this Society, and which Mr. Carteighe in his year had the honour of taking. (Cheers.) There were eleven papers this year. Mr. Baker took the Pereira medal, Mr. Morrall the silver medal, and Mr. Markham the bronze medal.

The PRESIDENT presented the prizes to these gentlemen, and then said that in connection with these prizes he had to state that Mr. Thomas Hyde Hills, who was unfortunately unable to be present that evening, but whose interest in the Society was well known, undertook some years ago to furnish additional prizes, and he therefore invested a sum of money which allowed the Society to present to the winners of the Pereira medal (Mr. Baker) books of the value of 5*l.*, to Mr. Morrall 3*l.*, and to Mr. Markham 2*l.* (Cheers).

THE JACOB BELL SCHOLARSHIPS.

The PRESIDENT said these prizes were given for an examination of an elementary kind of apprentices under twenty-one years of age. Mr. Bowen would present his report.

Mr. BOWEN said in presenting his report on the examinations for the Bell Scholarships, which were conducted by Mr. Blunt and himself, he thought they might congratulate the Society on the number of candidates that came forward to compete for them. Last year, he thought, had the greatest number—thirty-two; but this year there was a slight falling off—only two. This showed that these valuable prizes were appreciated, and of course it naturally ensued that a large amount of work was done to prepare for them. This of itself was valuable to the student. The papers of the successful men, Mr. White and Mr. Arthur Smith, were of a very high order; but many of the unsuccessful men did extremely good work, and were richly deserving of scholarships if the Society had them to bestow. (Cheers.) This led him to remark that he hoped the day might not be very far-distant when the Society would possess more scholarships than they had at present. He thought he saw one looming not very far away, when he mentioned the name of a man who had done much for the advancement of pharmaceutical education in this country,—Professor Redwood. (Loud cheers.)

The PRESIDENT, in presenting the prizes to Mr. Edward White and Mr. Arthur Smith, said the Society had no medals to give them this year, but through the kindness of Mr. Hills they had a few books to bestow.

THE PETER SQUIRE PRIZE.

The PRESIDENT said the next prize was given in memory of the late Peter Squire for practical botany. Mr. Corder, who carried out the scheme for the prize, was unable to be present, but he reported that of the ten papers received from London and four from Edinburgh, in order of merit the paper of Mr. Baker stood first. In a subsequent memorandum he stated that he never had the pleasure of examining a better paper than that of the successful candidate. (Applause.) Mr. CARTEIGHE, in presenting Mr. Baker with the prizes, said he congratulated him not only on what he had done for himself (Mr. Baker) but on what he had done for the benefit of the Pharmaceutical Society at large. (Cheers.)

INAUGURAL ADDRESS.

The PRESIDENT then said that he had the honour to introduce Sir Henry Ackland, President of the General Medical Council, who had generously consented to address them that night.

Sir H. ACLAND, who on rising to deliver the inaugural address was received with loud cheers, said:—

MR. PRESIDENT AND GENTLEMEN,—Permit me first heartily to thank the President and the Council of your Society for the great favour you have conferred on me by desiring that I should on this day address your students and yourselves.

When I consider the national importance of the institution in which we are assembled, the great and good work on which, for now forty-five years, you have been engaged, I cannot but account it one of the brightest days in the advanced years of a long working life, on which, connected as I am with the Medical Council, I am permitted thus honourably to meet you. Nor can I, on this occasion, forget that forty-five years ago there was bestowed on me the life-long benefit of studying dispensing and pharmacy in Oxford Street, under the guidance and with the friendship of the late Mr. Peter Squire, one of the chief promoters, friends, and ornaments of your Society. In the following year I had the great privilege of working in the laboratory of one of your members, Mr. Lloyd Bullock, translator of Fresenius, and favourite pupil of Liebig.

The science and the art of medicine, and the scientific and practical work which you here successfully administer and profess, are so intimately connected that any steps which draw them together confer substantial benefits on the country, and help to advance in special directions the interest of biological science by methods peculiar to modern times. That this is the case, and that it is not an exaggerated statement, is so well understood by yourselves that it were an impertinence to dwell on the fact in the presence of experts so distinguished as many that are present to-night. I would only, therefore, now say, first, that nothing seems to be more certain in the future of science than that the analytical and the synthetical chemistry will continue to extract new secrets from nature, and that these secrets will be revealed only to genuine experts in scientific chemistry; and, secondly, that the action of the new chemical products thus discovered will throw fresh light on the changes which take place during the life history of living organisms, whether considered individually or as a correlated whole—the latter secrets being revealed to the skilled physiologist, to the precise pathologist, and to all observant practical physicians who have been both scientifically and clinically trained.

It need hardly be remarked that under these terms are included not only those students of nature who deal with the composition and heredity of Man, but those also whose vocation leads them to investigate the habits, the health, and the disorders of any portion of the animal or the vegetable world, whether for the advance of pure knowledge or for the utilitarian objects of commerce and art.

This being so, and considering the relation in which the physician, the physiologist, the chemist, and the pharmacist stand to each other, I shall venture to day, first, to say very shortly, something more of this relation, for though indeed I cannot hope to offer anything that is new, yet familiar truths sometimes gain by new setting; and secondly, I shall make some suggestions, however trite, to those younger friends who, as students of pharmacy, are assembled here for the first time at a period of unsurpassed opportunity, of unprecedented interest, and, in their business relations, of increasing competition.

Now there are in this matter two fashions which, when carried to an extreme, equally deserve the rebuke of serious minds. The one is an exaggerated praise of antiquity—an infirmity arising mainly from a one-sided estimate, or inadequate knowledge of history. The other arises from an excessive confidence in the superiority, in every particular, of the present over the past, when viewed as a whole. What probably is true is, that our predecessors in certain points of character, were from various causes clearly superior to us, as we, in most material arts, though not in all, are to them.

It has been well said that we are, in a certain sense, the real ancients of the world, and that we ought to profit by the errors in the earlier days of its development. If in some things we of these later days have reason to envy the past we cannot certainly do so in all. Here is an instance. The College of Physicians of London published a new edition of their Pharmacopœia in 1651, "*studiis ac symbolis ornatur.*" Among the official articles of the *materia medica* are the following:—Silkworms, toads, kittens, grasshoppers, ants, swallows and their young, earthworms, wagtails, green frogs, scorpions, moles, vipers, foxes.

And parts and excrements of the following:—Ducks, geese, eels, boars, herons, beavers, wild cats, horses, lions, wolves, snakes, rhinoceros horns, skulls of men who died a violent death, the exuvie of snakes, frogs' livers, swallows' nests, and ants' eggs, partridge feathers, foxes' lungs, and many others too nauseous to be named.

William Harvey is among the Fellows whose names are attached to this volume. It is dedicated to King James, who is addressed as the King of Great Britain, France, and Ireland, and as "*Deus tutelar*" of the College.

It would be as tedious as it is here unnecessary to discuss at length, how, considered historically, so monstrous a list of medical agents could have been authoritatively issued, after Linacre had lived and taught in that great College which he founded, and which was destined to shed lustre on the history and character of medicine. It was promulgated after literature and science had each begun to deliver their message to the later middle ages, through persons of so exceptional

power and wisdom as Linacre and William Harvey. There is nothing akin to this in history, except in the grosser forms of superstition, which have ever been entangled among higher religious convictions, and which have stamped their dismal footprints on the sands of time.

It is not doubtful, to those who have investigated the subject, that notwithstanding the errors and fancies of the Eastern nations, medicine was studied long before our era in India, Egypt, Arabia, and Greece with an acumen and success which are truly astonishing. The modern researches of Brugsch and Ebers and others tend to show a serious attempt at medical and pharmaceutical research in the Thinite dynasty, some thousands of years before the Alexandrian period, when anatomical inquiry laid the foundation for ever of scientific medical knowledge and therapeutical practice. But, as was the case with more than one of the higher departments of human thought, this knowledge was darkened in the Middle Ages, and became for a time submerged in a way akin to the catastrophes of geological epochs, to rise anon in happier conditions and to thrive in purer air.

The whole history of the armoury of physis and of pharmacy brings a grave lesson to all who study the evolution of civilisation. It is a lesson, however, which suggests a contingent danger. Are we quite sure that every modern scientific dogma and every new recorded experience will stand the test of time? Are we sure that the grave cautions of Hippocrates, *ἡ πείρα σφαλερὴ ἢ κρίσις χαλεπή*, are no longer needed by some?

In our new Pharmacopœia we retain one, musk, of the most disgusting remedies for nervous disorders, and we do so because the evidence of its value is still said to be adequate. But so also doubtless, according to their illogical notions of proof, was the evidence of the value of the parts of nearly 150 animals for the purposes of medicine to the College of Physicians in 1651. The British Pharmacopœia has discarded all but eleven, though "syrup of foxes' lung" is still sold by chemists in the east of England as a remedy for cough. Will this number be increased or diminished? It would be idle to answer this precisely. We may be grateful to the animals which by their amazing vital laboratories make bountiful for our medical armoury fats, sugars, wax, albumen, colouring matter, and blisters. Yet it is probable enough that their labours may be largely dispensed with. The modern chemistry now produces saccharine, dyes and flavours, irritants and ferments readily, and some in vast amounts, whereas a few years ago no organic substance had been made, or was expected to be made. It may of course be said that inasmuch as the animals we take for common food are to be reckoned, as far as we are concerned, convenient and cheap laboratories for converting vegetable into animal constituents for our comfort and support, it is reasonable that special parts may serve also for medicines. But it was quaintly remarked some years ago, by Sir James Simpson, that were a man ordered to take sulphur as an alternative medicinally in the homœopathic dose of the eighth dilution every second, he would have had to go on for thirty thousand years before he had taken a grain of this medicine. But I would add that had he eaten meanwhile a single egg daily for breakfast he would have consumed in the same period considerably over a ton of the alternative in his food.

Fantasies of this kind have their serious side, when we consider the probable value of many reputed remedies yearly increasing in numbers. They point to the supreme importance of combining the threefold modern researches of the Chemist, the Physiologist, and the Therapeutist according to the acknowledged methods belonging to them respectively. Quite lately the woorara poison was stated to be a specific against hydrophobia, and rattlesnake poison has been recommended for scarlet fever. To say whether they are or are not true remedies can only be decided by careful investigation by competent persons with opportunities adequate to the occasion. How or why they are remedies, if they are so, is a physiological question of still deeper importance. Even then, their atomic constitution being known, it would remain in the womb of the future whether kindred substances exist or can be made. In the case of the former body, the woorara, a physician has been reprimanded by the Home Office for taking the instant steps requisite to ascertain the purity and strength of the woorara, previous to the administration of it to a person severely bitten.

Now, for this among other reasons, the value of a step about to be taken by the Pharmaceutical Society cannot be overestimated. It is decided, as I am informed, to establish a laboratory for the advancement of pharmacology by research. It is to be available for the purposes of investigation and research in chemistry and other branches of science relating to pharmacology. To determine the exact constitution of new drugs and alleged remedies and the precise composition of alkaloids of acknowledged or hypothetical value, to discover by analysis or synthesis new remedial agents, and to obtain absolutely pure bodies of known constitution for experimental or therapeutical purposes, are all objects suited to and worthy of such a laboratory.

This is not the occasion, nor am I entitled, to speak in detail on the future of an institution of this kind. But it is clear that among the dangers of our time is the multiplication of tools of doubtful temper, and the flooding the already overstocked armoury of medicine with useless weapons, to the distraction of students, to the injury of true physis, and the vexatious overloading the stores and increasing the labour of the practical dispenser and druggist. To the many honourable manufacturers of chemicals to whom the medical profession as well as retail pharmacists throughout the country are greatly indebted for the purity, elegance, and value of many of their preparations, such an institution will be a protection against the less cautious dealers in the common market.

I know no method by which the Medical Council might more usefully advance the progress of the Pharmacopœia, one of its most important duties, than by aiding research in this laboratory. It will also have a just claim on the large Government grant which is given annually to a committee, including among its members representatives of the Royal Society in every department of biological progress, as well as the Presidents of the Medical Council, and of the Colleges of Physicians and of Surgeons of England.

Before quitting this part of the subject it will be well to remember that the sagacious Sydenham, before the serious revision of the London Pharmacopœia, foresaw and stated in his "Treatise on Dropsy" some of the dangers of exclusive reliance on chemistry for the purpose of therapeutics, a danger into which some even now might run were it not for the advance of clinical observation combined with the modern physiology. He said:—"Just as Hippocrates blamed those who, in their exceeding curiosity and officiousness busied themselves more in speculations on the human frame than in practical observations upon the intentions of nature, so may a prudent physician of the present time blame those who believe that medicine is to be promoted by the new chemical inventions of our day, more than by any other process whatsoever. To hesitate in our acknowledgments to chemistry for more than one valuable medicine, and for more than one method of satisfying the indications of treatment, would be ungrateful. . . . The art is a useful one, but most useful when limited to the Pharmacopœia. Blame—or, if not blame, at least error—lies at the doors of those who have so tortured and overheated their brains as to believe that the chief weakness of medicine is its want of great and efficacious remedies, which nothing but chemical preparation will supply. Viewing the matter closely, we shall find it otherwise. The chief weakness of medicine is not our ignorance as to the ways and means by which certain indications may be satisfied, but our ignorance of the particular indications that thus want satisfying. How I can make a patient vomit, and how I can purge or sweat him, are matters which a druggist's shop-boy can tell me offhand. He can tell me too how to cool a man when he is heated. When, however, I must use one sort of medicine in preference to another, requires an informant of a different kind—a man who has no little practice in the arena of his profession."

These general considerations lead on directly to the subject of the lists of the *Materia Medica* which are issued by authority. Now it is a common error to suppose that a national Pharmacopœia is synonymous with or should be equivalent to the *Materia Medica*. This is very far from being the case, and the notion, though held by some persons whose opinion deserves full consideration, leads to much misconception and dissatisfaction. Formerly to a considerable extent it was so. The Pharmacopœia of 1651, for instance, just now referred to, contained a list of 150

animals to be used in medicine. The composition, therefore, of a scientific or modern Pharmacopœia begins with a policy of exclusion. This had been steadily and thoughtfully pursued by all the Colleges of London, Edinburgh, and Dublin for more than a century. It professes to include only remedies of proved value, and then aims at saying authoritatively how these can best be prepared. The physician lays down the remedies to be included. The pharmacist states in what way they can best be made. But not wholly thus, because the physician, joining with the physiologist, has to point out how they can be most properly administered in respect of method, of strength, and of physiological combination. The two first require the joint agreement of the physician and the pharmacist.

It may happen, and has happened, that these three powers are possessed by one person. But the rapid development of all three departments make this, as specialising continues with the increase of knowledge, a rarer gift. The possession of skilful art (or so-called practice) is in these respects as necessary a possession as that of abstract science, both for the physician and for the pharmacist.

Time forbids to enter into the interesting history of the successive issues of the English, Scotch, and Irish Pharmacopœias. Every edition of each had for many years striven to attain a higher standard of excellence. But the time was to come when a common standard was necessary for the nation.

In 1858 the Medical Council directed a carefully selected Committee, the late Sir Robert Christison being Chairman, to commence this work, with the aid of a distinguished member of the Pharmaceutical Society. In 1859 they presented their first report. In the second report of 1860 they announced that they had agreed on a complete list of all substances employed in the treatment of disease. Many remedies contained in the Pharmacopœias of the three Colleges of Physicians were removed and many new ones were adopted. The several Committees met more than four hundred times at this stage of the transaction alone.

Prior to the publication of this important volume a full account of the principles on which it was constructed was drawn up ("Medical Council Minutes," vol. ii. p. 80). A perusal of this and of several subsequent reports will show the great difficulty and labour of the undertaking. It is not too much to say that this difficulty has been faithfully dealt with by the members of the Medical Council and of the Pharmaceutical Society and by the other persons who, for now more than twenty years, have successively undertaken the task of meeting it.

And I feel that I shall be forgiven for naming as especially the present Chairman of the Medical Council Pharmacopœia Committee, Dr. Quain, and the officers of the Pharmaceutical Society, Professors Redwood, Bentley, and Attfield, who have, with skill and labour so fully recognised as to need no eulogy from me, acted as our editors.

The British Pharmacopœia was at first and in some respects a compromise arrived at by the distinguished champions of the traditions of each division of the kingdom; and therefore the first edition rapidly gave way to one constructed with no bias of a local kind. A national Pharmacopœia having been once adopted, it became the sole object to make it complete and exact on certain lines. Finality, however, in respect of completeness and of exactitude, is not, scientifically speaking, attainable in a modern Pharmacopœia. In respect of completeness opinions will, for a long time yet, differ as to the articles which should be included, and because critics would not agree as to the articles which should be cast off as not entitled to the stamp of national authority. On the one hand, unfair rejection of traditionally approved medicines might take place; on the other, too hasty recognition of drugs whose temporary popularity depends, not seldom, on a name, an appearance, or a person. Therefore the national Pharmacopœia must be inevitably open to the charge of being to some extent, as it is called, "behind the time," but it ought never to be justly charged with having on its list a single article of proved worthlessness. Again, completeness in all respects of the whole "Materia Medica" the Pharmacopœia does not attempt to possess. In the art, and indeed in the science, of medicine are many true remedies which are not and cannot be put upon the shelves of the pharmacists. Some of these are among the most powerful of all remedies in dealing with human infirmities.

Direct action on the intellect and on the emotions of the

sufferer, many of the remedies by light, or heat, or cold, by hygiene, and by climate, are sometimes more potent for good than could be all the drugs of the world.

And in respect of exactitude, the Pharmacopœia must also be for a time defective. The progress of chemistry alone introduces new modes of combination and new ingredients to combine every year, while the physiologist discovers new and subtle actions to be controlled or aided in unexpected ways. The very existence of a formula will sometimes suggest its modification.

And, therefore, there always will be in future, in some form, the admirable contrivance of the "Extra Pharmacopœia." It is of course open to discussion whether the Medical Council should maintain and issue a suggestive document of this nature. Opinions may differ as to how often it should issue authoritative appendices, and as to whether the decennial revision of the United States is or is not the best arrangement. I will only venture to say that Squire's "Companion to the Pharmacopœia," and the "Extra Pharmacopœia," are works that will always have, as they deserve, grateful acknowledgment from all interested in the progress of medicine and pharmacy, and that they seem to be valuable for the general growth of knowledge, in the same way that the large voluntary associations of modern times are serviceable to the state, though their conclusions by majorities are happily not law.

The United States Pharmacopœia, as you are aware, prior to the last decennial revision, had adopted to some extent the principle of authoritatively distinguishing between first and second class medicinal agents. A secondary (*i.e.* third) list is given in England in the private "Extra Pharmacopœia." The late Sir Thomas Watson, Mr. Simon, and myself at the Social Science Congress in the year 1861, endeavoured to draw attention to the importance of distinguishing between them, by proposing a list of "Standard Remedies" placing all which could not be so designated in a separate category. But we were compelled by circumstances to desist from the attempt.

These remarks are partly dictated by the conviction of the dangers in which we lie, of seriously and needlessly overloading the shelves of the practical druggist, as well as of trifling with the memories and the time of students both of medicine and of pharmacy.

In conclusion, it may be said that, by recent resolution of the Medical Council, steps have been taken which will practically insure the best methods of revision by either addition, subtraction, or alteration, and by annual report through competent advice on any subject bearing on the progress of any department of the Pharmacopœia. This constant watchfulness, without too frequent meddling and change, is certainly called for. It is sufficient to name such recently introduced remedial agents as nitro-glycerine, amyl nitrite, physostigmine and calabarine, salicylic acid, pilocarpine and antipyrin with their delicate difference of action, and the whole class of antiseptics and hypodermic injections, to remind ourselves of the revolution which pharmacy and pharmacology are undergoing and have undergone in the last twenty-five years—a revolution of ideas as great as that which modern embryology has introduced into the conceptions of morphology, and into the study of evolution.

The labours of Fraser, Lauder Bruton, and other pharmacologists, when considered in relation to the precise knowledge obtained, and hereafter to be obtained, through experimental physiology, comparative pathology, and comparative therapeutics, open a wide vista of potential usefulness for the prevention and treatment of disease in the animal and vegetable world. In the whole range of science (astronomy not excluded) there is nothing more marvellous nor more dazzling. The future possibilities of the carbon compounds through synthetical chemistry, taken into account with the traditional beliefs in vegetable agents throughout the various nations of the world, justify, I feel sure, this strong statement.

This short history, then, of the British Pharmacopœia suggests the duty of a brief allusion to the still larger question of an International Pharmacopœia. As the intercourse among nations becomes more constant, and as ideas and wants become more uniform among the family of man, such an undertaking would certainly appear to become more desirable and more easy of execution than at any previous period of history.

But is it yet desirable, and if so is it feasible? Under

certain limitations the answer must be in the affirmative. What these limitations are was well shown in the discussions on the subject at the Pharmaceutical Congress in London in 1881. They practically resolved themselves into restricting the work to the mode of preparing medicines which are deemed by the best physicians and surgeons in all parts of the world to be the most important. The determination of what these are would in itself be no small matter. It was to this that the proposal as to the "Standard Remedies" above referred to was directed. If formulas were agreed upon for one hundred such agents to which more would be gradually added, it would be a clear advance in the pathology and therapeutics of the future.

This, however, is not the view of all persons. In France, especially, there seems to be a desire for a universal and authorised Codex of all received medicaments. I doubt if any true physician would aid in this with a view to improving scientific treatment. Such a Cyclopædia would doubtless be of great interest, but we know that it would contain hundreds of recipes comparatively useless for healing.

No one who has considered the matter from this point of view can think that such volumes as the elaborate "Pharmacopée Universelle" of Jourdan, or the "Universal Pharmacopœia of Europe and North America," by Dr. Hirsch, now in progress, can advance the precise science of therapeutics, or have value beyond that of most convenient works of reference as to facts.

The real object of a Pharmacopœia is to help to heal by the best and quickest and pleasantest methods, excluding inferior, spurious, and worthless agents. A small volume which would lay down by international consent, the mode of obtaining with certainty the best remedies, made in the best manner, with rules of how to preserve them in all climates, and how readily to distinguish them, would be hailed with satisfaction by practitioners and by pharmacists in every part of the world, and especially in districts, of which there are many, which are in a markedly transitional condition.

Since the London Pharmaceutical Congress of 1881, steps have been taken to promote this object, which most persons then agreed to be desirable if attainable. But at present there is not much real progress. Professor Redwood has favoured me with a copy of the "Projet d'une Pharmacopée Internationale" by Mr. Anthony von Waldheim, dated 1885. This document, full of earnest labour, illustrates the real difficulty of the undertaking when carried on by a Committee of Delegates from eighteen States. The most hearty acknowledgments and appreciation of the labours of Mr. von Waldheim are unquestionably due to him.

It is certain that the Medical Council charged by the law of Great Britain to maintain the British Pharmacopœia will not fail to aid any step by which within the limits of its legal power it can promote the perfection of scientific pharmacy. There are great opportunities for this among the English-speaking race, of the old and of the new world alike, and co-operation in this matter with the active scientific pharmacists of the United States of America may be certainly relied upon. It cannot, I think, be doubted that there is much yet to be learnt by us from India, and from our cousins in the new world, as to the constitution of remedies originating in the hotter climates and specially adapted to them.

It is a source of regret that no steps have been taken to obtain representatives from India, the Dominion of Canada, and Australasia, to co-operate in England directly in future researches connected with the Pharmacopœia. This would seem more desirable and reasonable, as by a recent Act colonial and foreign practitioners are to be entered upon the Medical Register after the present year.

The Medical Council is not likely to depart from the course it has adopted with so much success of allying itself with representative members of the Pharmaceutical Society. On this body by law devolves the responsibility of educating and qualifying the future pharmacists of Great Britain. It has always shown energy and administrative capacity in the development and fulfilment of this important and national obligation.

It is a special privilege to be able to express this sentiment, in the presence, as I am informed, of two distinguished pharmacists of Australia.

From these questions we should turn to those which specially concern the future education of pharmacists. Fear

has been sometimes expressed that the highly educated pharmacist will interfere with the functions of the medical practitioners, many of whom must in rural districts dispense their own medicine. Experience and observation show that this is a fallacy arising from a mistaken reading of the past. The uneducated and ignorant step in where better men will not interfere. The whole tendency is in this manner to subdivision of duties. Moreover, it is not true to say the pharmacist has no concern with the action of the agents which he dispenses. Theoretically and professionally he has not. Practically he has. He dare not dispense that which he believes to be dangerous in the quantity written. Therefore he has to know the danger point of all dangerous substances that are in use. He may form his opinion of the uselessness of certain agents, but he cannot, as the telegraphist does, forward mechanically whatever is ordered. A dispenser of intelligence is an observant and thoughtful person, and brings a watchful and often a critical sense to bear on all that passes through his hands.

This rough outline of the present circumstances of the English student of pharmacy will have already been filled in with a thousand details by the older students. We are all students nowadays, though of different ages. The younger, however, have more concern with the sketch than the old, because they have for years to come to fill up the pattern each for himself.

A fear has been expressed by even so great a master in pharmacy as Mr. Frazer, of Glasgow, that there is a tendency in the Pharmaceutical Society to over-educate. It would be a betrayal of their trust if the Council were to invite students to swell the ranks of pharmacy when they are unfit for the pharmacy of the future. The number of rejections at the examinations is no doubt deplorable. It will, however, soon be found what schools give the secondary education adequate to the just requirements of your standard.

You cannot have heard or read much even of the commonest journals without coming across unceasing discussions as to the method of modern education. I hope you do not read them. Educate yourselves. Your first, your lifelong, your best education—may it have been so with all of you—began at your mother's knees. "The child is father to the man." The seed there planted will bear fruit, ripening till the day comes when the tree shall fall. Where the tree falls, there it shall lie.

The fundamental question that of late has perplexed educators has been whether education should be religious or secular, general or technical.

For you at all events it has to be neither of these alternatives. It must be all; but each in its proportion and at the proper time. You are come here to pursue the technical portion; to that you have now therefore to apply with all your might. But whatever you have made yourselves by such opportunities that have been hitherto permitted to you, whether of religious discipline or of secular training, that character you bring now to your technical work. If you are lovers of truth, of order, accuracy—if you do as you would be done by—if you are at once modest, and yet manly and self-reliant; above all, if you think, as well as commit to memory, then your work will daily prosper with you, and in it you will rejoice. There is no occupation in life in which personal character tells more than in the duties of a dispenser. They are replete with interest of the most varied kind. The details are to him drudgery or pleasure, as he makes them to be. Cleanliness, exactitude, order, punctuality, shrewdness, become a habit which is simple delight. If you have not these habits and this delight, disorder and discomfort, dissatisfaction and dirt, will be your daily lot. If you have, the most practical among you will live on the borderland—I would rather say, within the boundaries—of science, and be in relation to the sufferings and sorrows and troubles of your fellow-men, and become their friend. This is no ideal fancy. In a few masterly words, one to whom you and all pharmacists are deeply indebted, the venerable Professor Redwood, pointed out not long since that whereas the business of the druggist in the last century was generally a paltry trade, the occupation of the skilled pharmacist is becoming one in which education and science are essential to gain the position which pharmacy deserves, and which it is obtaining in this country, as on the Continent of Europe. May you, my young friends, show this by using now the great opportunities this institution lays open to you!

It would be a pleasant task to say something of pharmaceutical studies; this, however, will be more wisely said by your appointed teachers. You must work and think, as well as listen. The time is passed with all of you personally for considering whether preliminary examination should precede apprenticeship, and both be concluded before you come hither. I advert to this only because this Society has recommended for you the right course, the course, that is, which will lead to a just knowledge of your business and to your personal happiness. It is one based upon a sound general education in your boyhood prior to the study of the material world by the method called (it is becoming a cant word) science. Both are antecedent to practical application and method, which will advance your daily and bread-winning work. But, again, educate yourselves. The opportunities of the present day enjoyed by those who study here surpass the dreams of the best of my student days, the days when two of the most able of my teachers ridiculed the student who strove to master the stethoscope and to be skilled in microscopic observations. Teaching now marches generally on right lines; it will no doubt be carried on with various skill and divers aptitude. But books, laboratories, and instruments are in their due proportion available to all. The worst part of our educational structure lies in the examination system, of which Professor Michael Foster some time since spoke here fully. For that you are not responsible. It is year by year being improved, not in severity but in method. It is now felt to be cruel and unjust to examine youths in what they have not been taught to study, and to seek to extract from them what they therefore cannot know. Teaching and examining should be part of an organised interdependent whole. Like good builders, make each brick you lay in your building fill its proper place, and see that each one on which you bestow your labour is worth the laying. Your work will then be good, and each successive course will rest firm and true on a good foundation. Trust your teachers; mistrust the carping criticism of the present day. Have faithful hearts, love of Nature, but hearken not to the deadly whisper that man by only scanning the world of matter can read the whole lesson of the Infinite.

Contentment with your lot, whatever it be, is an element of true success, as it is of happiness.

It is not growing like a tree,
In bulk, doth make man better be;
Or standing long, an oak, three hundred year,
To fall a log at last, dry, bald, and sere.
A lily of a day
Is fairer far in May,
Although it fall and die that night;
It was the plant and flower of light.
In small proportions we just beauties see,
And in short measures life may perfect be.

Mr. President, thus briefly it has been my endeavour to draw a rude picture of pharmacy as it was, and of the temper in which it is now carried on. I have to express confident hope in its growth and progress for the future. How confident should be the hope in that future, as well for the growth of knowledge as for sober search after wisdom and the alleviating the necessities of man, is well known to you and your colleagues in the important branch of the healing art which you here both practically and scientifically cultivate.

The PRESIDENT said as Sir H. Acland had spoken so sympathetically of their brethren at the Antipodes, he thought it would be right to ask Mr. Bosisto, who had been a student of this Society, to propose a vote of thanks to Sir Henry Acland.

Mr. BOSISTO, in proposing a vote of thanks, said it had seldom fallen to the lot of a man after forty years' absence from his native land to have the honour and pleasure of listening to an address like that they had heard that evening. As he had said, he had been absent from his native land for just upon forty years, and to be called upon that night to move a vote of thanks to Dr. Acland was to him one of the greatest pleasures he had had since he had revisited his native land. It was well and noble to find gentlemen of mature age come before a society like this to tell young men of past knowledge in science, or the dangers that were before them, and to instruct them, as far as possible, in the right lines they should follow in their future lives. To him it was remarkable

to know that the gentleman who had addressed them that evening, and given such an elaborate, learned, thoughtful, and instructive address, should be beyond the years of three-score and ten, and yet when he knew that the schooling that that gentleman received in his younger days comported very much with his own, it led him to feel that old men after all possessed knowledge of value that young men should listen to. (Applause.) He trusted, therefore, that the young men who were present, the rising pharmacists, would diligently study and think over the address that they had heard, that they would follow it in their after years, and that they would obtain in pharmacy, chemistry, botany, and all the allied sciences sufficient to help forward the knowledge that was necessary not only in the medical department but also in that of pharmacy. He was proud to be present on that occasion, and he heartily thanked the President for calling upon him to propose a vote of thanks to Dr. Acland. It was pleasing and satisfactory to him to know that while they had men in this country who were endeavouring to teach the rising generation, they had men in distant colonies under the flag of Great Britain—(loud and long-continued cheering)—who were endeavouring to teach the rising generation there in the same direction which was followed in the mother country. It was scarcely necessary for him to say that they in yonder Australia had pharmacy to the front, that they had young men earnest in study, diligent in their work, and who yet were as fond of fun and frolic as young men ought to be. (Laughter and applause.) They in Australia believed in moderation in every direction, and never checked young men in following all those athletic sports they thought necessary to them to bring forth their mind in all its fruitfulness and precociousness, so that in future years they would become stern, honest, industrious, and hardworking people. When they had young men yonder studying the various sciences, and while the professors there were endeavouring to do their duty to them, they felt that they had a body of young men rising up amongst them who would set before the countries yonder in Australia knowledge such as they thought those here possessed. And let him tell them that the race of life was as great and as fast in Australia as it was even here in England, and it was only the diligent man—the industrious, sober, and hard-working young man—that made his mark there, and that it was as difficult to hold a position in that country as it was for a person in England. (Applause.) He would not detain them longer, except to say that he was proud to have listened to the address, and he trusted young men would pay heed to what had been said. He himself, who was now over sixty years of age, was once a student of that Society, and whatever knowledge he had attained since, he owed a great deal to the Pharmaceutical Society of Great Britain; and having been in yonder country so many years, and done as much work as he possibly could, he hoped and trusted that the Pharmaceutical Society of Great Britain would send forth men into that distant country, and the other colonies of Great Britain, who would be able to do their work in the future as those who had been students of the Pharmaceutical Society had done for nearly forty years. (Great applause.)

Dr. BURDON SANDERSON, in seconding the motion, said he regretted someone else had not been called upon to perform the duty. He performed it, however, with pleasure. He never heard Sir Henry Acland deal so well with the difficult questions which they had now before them, both with reference to the progress of pharmacy itself and the progress of medicine, which they all congratulated themselves upon, and which was so essential and important. With respect to the progress of pharmacy they all felt what an extremely difficult matter it was in the midst of daily obligation that they had to acquire practical and technical knowledge, and at the same time to go about it in such a way as to advance the subject in which they were interested. When he said that doctors and pharmacists were all working in the same direction, that they were all going forward for the same result, they must all be, as Dr. Acland so admirably taught them, both naturalists in the widest sense, and physiologists, and they ought to be acquainted with chemistry, and bring the resources of all those subjects to one centre—to the relief of human suffering. That was the great object in which they were all equally engaged. (Hear, hear.) He could not help congratulating the Society on the most admirable and instructive

address which had been delivered, and which would serve as an excellent programme of the efforts of the Society (Cheers.)

Sir H. ACLAND in acknowledging it said he not only thanked the whole of the assembly, but the President more especially for the kind way in which the motion had been proposed, seconded, and received. He would make but two remarks—he was deeply sensible of the honour conferred upon him by the representative of one of the Governments of Australia, and by his most distinguished and valued friend and adviser Professor Burdon Sanderson, who was unexpectedly called upon to second the motion. He thanked them heartily, but the only reason he now spoke at all was that above all he thanked the young men for the sympathy and kindness with which they received his remarks, which, at all events at the outset, must have been very dull. He thanked them for that which was most precious to the old, and, happily for the young, precious to them also—sympathy for what they believed to be honest intention, for the good of themselves and for the progress of human knowledge. (Applause.)

The PRESIDENT having announced that the next evening meeting would be on November 2, the meeting separated.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

THE NIGHT PHARMACEUTICAL SERVICE has officially been in operation in Paris since October 1, as an adjunct to the night medical service. It appears to be working satisfactorily. The simple and practical conditions under which the public can have the benefit of the new arrangement were detailed in THE CHEMIST AND DRUGGIST of June 19, when the project was first under serious consideration.

FUSION OF SCIENTIFIC SOCIETIES.—The Scientific Association of France, founded in 1864 by the celebrated astronomer Le Verrier, and the French Association for the Advancement of Sciences, both officially recognised as being of "public usefulness" (*utilité publique*), decided at their last meetings, some time since, to unite their efforts and merge into one association. A Government decree, issued on September 28, has approved of the fusion, and granted to the new association all the benefits and privileges pertaining to societies of recognised public usefulness.

SALICYLATED BEER.—The police and the judiciary have agreed with the Paris Municipal Laboratory on the necessity of seizing all salicylated beers offered for sale, and prosecuting all persons knowingly dealing in the adulterated product. A significant fact is that in Bavaria itself, whence the incriminated beer mostly comes into France, the sale of salicylated beer is strictly prohibited. It was recently reported that, at a meeting of the Institute of Applied Chemistry, held at Nuremberg, and attended by Drs. Kaiser and Merckel (of Nuremberg), Dr. Helder (of Erlangen), Mr. Herz (of Würzburg), and others, it was declared unanimously that "the use of salicylic acid in beer is dangerous for public health," and decided by a majority that "the use of salicylic acid by brewers might be tolerated for beer to be exported, but should be prohibited in beer to be sold at home." Very considerate for foreigners! The argument afforded by the Germans themselves was, it is needless to say, used with telling effect by the Municipal Laboratory, and all efforts are to be made to prevent the introduction and sale of salicylated beer. The prohibition is eminently proper. If salicylic acid be allowed in beer, it must be allowed in butter, in cheese, in preserves, in syrups, in milk, in jellies—in everything we eat, in fact. Then, how much, at such a rate, will be taken in a day by every man, woman, or child? But there is another strong argument against the use of salicylic acid: it is that it permits the use and transportation of alimentary products of inferior quality; of beer that begins to become sour; of currant jelly made with stale, fermented berries; of syrups so deficient in sugar that they would not keep a day in warm weather; and so on all through the list. But it is useless to "smash open doors" ("*enfoncer des portes ouvertes*"). Salicylic acid has been condemned, and justly so.

THE PARIS PHARMACEUTICAL SOCIETY.

AFTER two months' vacation the Society began again its monthly meetings on October 6, with President Prunier and Secretary Planchon at their respective posts.

The report of the committee on *Military Pharmacy* being called, M. Planchon said that during vacation he had sent a circular to all the pharmaceutical societies of France, asking them to co-operate with the Paris organisation in opposing the legislation threatening the abolition of military pharmacists. A form of protestation was suggested, to be presented at the proper time to Parliament, pharmacists in the meanwhile being advised to use all the personal influence they possess with deputies and senators to convince them of the injustice of the proposed change. So far adhesions had been received from societies representing 52 departments, and more are expected. During his circuit tour as an examiner, M. Planchon had occasion to visit a number of colleges of medicine and pharmacy, and to speak with the professors attached thereto; all those interested in pharmacy were opposed to the Bill, and had signed a protest against it, which is to be used when the occasion presents itself. M. Crinon added that, as the Secretary-General of the Union of the Pharmacists of France, he had by direction of the Society taken similar action, and received from several provincial associations adhesions to the petition of the Paris Society, to be presented here in their behalf. These numbered six or seven departments more to be added to the fifty-two already mentioned.

From some confidential communication imparted by a member—which, by the way, shows French pharmacists are better politicians than they are given credit for—the Military Pharmacy Bill stands but little chance of success. The clause inserted in the project of the Minister of War has been put in by some power behind the throne, who, it is confidently asserted, was deceived by the military surgeons, but will easily perceive the mistake and correct it, if it is not already done. Still the petitions and protests are kept ready for use if necessary.

M. Planchon, of the committee on *erineum*, the new grapevine disease, made a very interesting report on the state of French vineyards, a subject always worth listening to, especially when treated by one just coming from the vine-growing districts, and one with the authority of the genial professor of *materia medica*. He spoke quite at length on the phylloxera and its treatment, also of the comparatively new disease the *mildew*, which the French wisely spell *mildiou*, which has almost identically the same sound as the English word, unpronounceable to them. But phylloxera is too well known to need description. As to the mildew it is a disease caused by a peculiar fungus. Sulphate of copper, with or without slaked lime, is the best antidote. But most interesting was the description and history of the *erineum*. This is caused by the sting of a kind of acarus. In the spring the insects are of the two sexes, and after copulation the female, to provide for her offspring, stings the leaf of the grapevine near the roots of the hair. This causes the hairs to enlarge considerably, to curl and felt, and thus form a shelter for the larva. In other cases a cell of the leaf is stung, which causes it to increase in size, to blister, and then afford a home for the young insect. During the summer the larva remains in that state; although having no sex it lays eggs, as is frequently the case with insects of this sort, and thus reproduces itself till the autumn. Then it becomes enkysted for the winter, and in the state of chrysalis remains dormant all through the cold season. In the spring it comes out a full imago, with a sex, and the same cycle of changes recommences.

The remedy for this disease is to sprinkle the plant with sulphur. A good way to obtain specimens of the insect is to take an infected leaf and to leave it for twelve hours in distilled water, to which a little salicylic acid has been added. The object of the addition is not to kill the insect (the immersion does that) but to preserve the water from an invasion of vibrios, bacteria, and such microscopic formations. Then at the bottom of the vase almost any quantity of specimens of *erineum* may be collected and preserved for observation.

The committee on sulphate of quinine were asked for their report, but this being yet incomplete the meeting adjourned at 3.45 P.M.

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EDITORIAL NOTES.

SIR HENRY ACLAND'S ADDRESS.

WHEN it was announced that Sir Henry Acland would address the students of Bloomsbury Square on the opening of the session, it was felt that the occasion would be not the least important of the many brilliant autumnal gatherings in the lecture theatre, and that the address would rank high amongst the orations which have been given there by eminent men of science; and we are sure that for matured thought, scholarly diction, and effective delivery, the address of Wednesday night was not disappointing. The subject of the discourse was mainly the evolution of therapeutic agents—the gradual displacement from materia medica of a class of remedies nauseous and empirical; the accumulation of acquired facts in physiological science, and the combination of the labours of the physiologist, the physician, and the pharmacist, for the purpose of systematising medical treatment and proving the value of remedies. We are apt, Sir Henry Acland remarked, to have an exaggerated idea of antiquity, and, although it is indisputable that the ancients were superior to us in a few departments of knowledge, and equal to us in some respects in arts, still science as a whole has progressed enormously during the present era, and medical science has shared in that progress. Yet we must not too readily assume the superiority of the present, especially in view of the relics of therapeutic empiricism which remain in our materia medica. An amusing reference to the hundred and more nauseous and unspeakable substances which found a place in the London Pharmacopœia of 1651, recalled the fact that eight of these substances remain in the British Pharmacopœia of the nineteenth century, and that syrup of foxes' lungs may still be purchased in druggists' shops in the East of England. We sometimes pooh-pooh the physicking of two centuries ago, forgetting that such men as Harvey were practitioners, and intelligent practitioners, of that time, and that they believed as thoroughly in their therapeutics as we believe in ours. Were they wrong, and are we right? It is only within the last fifty years that a marked change has been effected in therapeutics; the introduction of active chemicals and vegetable principles dates scarcely so far back, and the number of new remedies has grown so large that it is necessary that something should be done either to stop the rapid increase or to ensure that what are introduced are reliable and proved therapeutic agents. This, Sir Henry Acland believes, is only to be attained by research of a three-fold nature: by the physiologist, the physician, and the dispensing druggist. This portion of the address naturally created considerable interest, for the association of the pharmacist with the more important living factors in medical science is what the advanced men of our calling have been energetically claiming. To some of his hearers the oration must have assumed a tantalising form; would not the President of the Medical Council now declare in favour of the pharmacists' demand for a share in the editing of the Pharmacopœia? Others in the audience could appreciate the skill with which the speaker steered his way through these dangerous rapids. He admired the good intentions involved in the establishment of a pharmaceutical research laboratory, and indicated that pecuniary aid from the Medical Council and the Government might be forthcoming. Recognition in any shape from the higher ranks may be desirable; but the wealthy Pharmaceutical Society can well afford to decline it in this form. The association of the physiologist, the physi-

cian, and the dispensing druggist in the compilation of the national Pharmacopœia is, in Sir Henry Acland's view, an accomplished fact, not a dream of the future. Christison had a pharmacist for his colleague in the compilation of the first British Pharmacopœia, and Professor Redwood's services as editor have been highly appreciated by the General Medical Council. The most weighty responsibility imposed upon that body by law is the compilation of the Pharmacopœia, and they had adopted as the most reasonable course a policy of exclusion, whereby only those remedies which were proved to be useful would have a place therein. This was largely the work of the physician, who from his experience could tell what was active, and the physiologist, aided by the pharmacist, could demonstrate what was the best form for and manner of administering remedies. Referring to the last edition of the Pharmacopœia, the orator paid a high tribute to the labour and zeal which Dr. Quain, as chairman of the committee, had imported into his task, and politely commented on the assistance which had been given by the professional editors whom the School of Pharmacy had provided. So in rounded periods, and in exquisite taste, was the delicate subject treated and passed over. Upon one point, however, Sir Henry Acland made a declaration of importance. He considers it to be desirable now that the Medical Act applies to the Colonies and India that those parts of the British Empire should have representatives on the Pharmacopœia committee, that is, medical representatives, for the Act only applies to them. This proposal is reasonable, and would help greatly to bind us with our Colonies in the practice of medicine. It might lead, too, to the formation of colonial supplements to the Pharmacopœia, incorporating indigenous remedies of proved value, some of which might gradually find their way into the home edition. The publication of official supplements, annual or otherwise, and the question whether the Pharmacopœia itself should be published decennially, as in the United States, are subjects for serious consideration. But without committing himself, Sir Henry Acland contrived to speak of "Squire's Companion," and "Martindale's Extra Pharmacopœia" in such flattering terms as to leave little doubt that in his opinion private enterprise was sufficient for the task of providing supplements. Alluding to the International Pharmacopœia, Sir Henry Acland expressed a desire for an agreement as to the strength of forty or fifty of the most potent preparations. He greatly admired M. von Waldheim's "Pharmacopée Internationale," although it showed clearly how difficult the task would be to secure uniformity. Comprehensive schemes, embracing all formulæ, were perfectly useless except as comprehensive reference books. The address concluded with some well-chosen remarks on the higher education of the pharmacist. These were general, but not so much so as to exclude a friendly reference to Mr. Daniel Frazer's revolutionary views on pharmaceutical education and examination. Mr. Frazer thinks that these are overdone. Sir Henry disagrees with him, and believes that they tend to make the young druggist a better and more intelligent dispenser. But he offered no direct compensation for the greater outlay; there is the moral satisfaction that after systematic education and a searching examination the pharmacist will be better qualified for the duties of a dispenser. The trouble is, however, that after qualification the pharmacist finds no dispensing to do. Sir Henry was not wholly ignorant of this, but could not see how the country practitioner could give up dispensing. It is regrettable that so high and so experienced an authority does not see any opening for the employment of the pharmacist's abilities towards the aid of medical research in any other way than in the investigation of a few new drugs. We want something more solid than that as a recompense for years of education and labour, and the half-dozen virtues

required for exact dispensing; but we seem no nearer to the issue now than we were ten years ago. The workers are better, the work is less, and the remuneration is decreasing. Who will solve the problem?

LOW PRICES.

LORD RANDOLPH CHURCHILL, with a laudable desire to promote all-round happiness, referred in a recent speech to an advance in price which has lately occurred in some articles of produce, such as indiarubber, isinglass, pepper, tin, lead, quicksilver, coffee, and wool. All people when they comment on markets in an abstract fashion seem possessed with the notion that things are gloomy when prices decline, and that advancing prices indicate and promise better times. This may sometimes be the case; it may be so at the present time. The Chancellor of the Exchequer says these advances illustrate the fact "that there is a revival of trade going on—a revival which seems to be a real revival, and it would not be rash or premature to say that we have, perhaps, at last touched the bottom of this terrible and protracted commercial and agricultural depression under which we have been so many years labouring."

We are heartily glad to hear it; in many branches trade has no doubt been dull, but it is by no means an invariable proof of bad times when prices fall, nor do advancing prices necessarily guarantee an improved state of things. Lord Churchill says the advance in coffee, for example, "means that the Ceylon and Brazilian people will probably make this year a good profit out of their coffee plantations, and the use of that profit will be that they will buy your manufactures." This expresses one of the underlying principles of free-trade policy—encourage the consumption of foreign products and rest assured these will be paid for in your own products or manufactures. That doctrine is axiomatic; but the promise that the Brazilian coffee-grower will be richer because coffee is dearer depends entirely on the cause of the advance. If it be due to a greater demand they will be, and that will indicate that we, the consumers, are already, richer; but if it be due to a proportionately diminished supply, the Brazilian coffee-growers will be no better off.

But before admitting that the low level to which prices have fallen during the past ten years is necessarily a bad sign we ought to look into the circumstances a little more closely. Assuredly to the majority of people the lower rate at which they can buy articles of food and luxury is a benefit; but decline has been so universal throughout all markets as to point to some general cause acting alongside of special events which occasion incidental fluctuations. This cause might be more abundant yield of the fruits of the earth all the world over. To some extent this cause has operated; as civilisation goes on more land is cultivated, and is better cultivated, so that the earth's total yield does tend to become greater, and to that extent the inhabitants are so much richer. An alternative assumption is that prices have fallen because the consumption has fallen off. This is or ought to be the theory of those who see in the decline an evidence of bad times; but except in isolated cases the evidence of statistics does not support this view. The generally-accepted explanation, and the one which is supported by overwhelming evidence, is the general reduction as a consequence of the appreciation of gold. A hundred sovereigns will now buy a greater quantity of most of the earth's products than it would have done ten years ago; and this not because those products are more abundant, but because gold is scarcer in proportion to the demand for it. So far as that theory extends it is evident that a man with 100*l.* is a

richer man now than a man with the same amount was ten years since.

From a short table lately published by Messrs. Gehe & Co. it appears that the average decline in pharmaceutical products in the decade from 1876 to 1886 has been no less than 40 per cent. Of twenty-three different articles we find that three only (subnitrate of bismuth, chloral hydrate in crystals, and iodine) show an increase in price of 23, 7, and 60 per cent. respectively, and precisely these three articles are in the hands of monopolists, who regulate the price almost at will. The fall in value is most marked in the case of salicine (92 per cent.), santonine (80 per cent.), sulphates of quinine and quinidine (78 per cent.), apomorphine (64 per cent.), hydrochlorate of morphine (60 per cent.), digitalin (58 per cent.), and ergotin (50 per cent.). Next follow pepsin (48 per cent.), nitrate of strychnine (44 per cent.), thymol (38 per cent.), benzoic acid from gum (36 per cent.), carbolic acid and chloroform (35 per cent.), and caffeine (34 per cent.). Salicylic acid (28 per cent.), veratrine (27 per cent.), and nitrate of silver (17 per cent.) have suffered least. It should be noted that even in 1876 prices were already falling, and, had 1873 to 1883 been taken, the difference would have been still more marked.

Here is another table issued by the directors of large chemical works in the North of England as an excuse for the absence of a dividend:—

—	1883	1884	1885	1886
Alizarine, per lb.	2s. 6d.	1s. 6d.	1s. 4d.	9d.
Anilines, per lb., about 50 per cent.	—	—	—	—
Benzole, per gallon	12s.	3s. 8d.	3s. 3d.	1s. 6d.
Cresote, per gallon	3½d.	3d.	2d.	¾d.
Pitch, per ton	34s.	32s.	18s. 6d.	13s. 6d.
Anthracene, 30 per cent.	£57	55l.	43l.	20l.
Sulphate of ammonia, 30 per cent.	22l.	15l.	12l.	10l.
Oxalic acid, per lb.	6d.	5d.	4½d.	3d.

The prices now obtained, say the directors, are very much lower than have ever been previously known in the trade, and singularly *this condition has come about in face of an increasing consumption and a great decrease in stocks.* The italics are ours. This company (Sadler & Co., Limited, Middlesborough) sold chemicals last year to the amount of 133,083l. 8s. 4d., and lost on their year's working 18,003l. 16s. 1d. If they had obtained the average prices of the previous two years they would have received 117,278l. more than they actually realised. German competition, they say, has caused the mischief. The result is bad for their shareholders, but surely it is an advantage to a much greater number of people. Like Stephenson's engine, it may have been bad for a "coo" or two, but the world at large has reaped the advantage.

FOREIGN COMPETITION.

It is not invariably the greater energy of the Germans, or the superior skill of the French, or the advanced intelligence of the Americans, which defeats our British houses in the competition in foreign markets. An instance of combined energy, skill, and intelligence displayed in a not altogether creditable manner has lately been brought before us. The representative of a London wholesale drug firm, travelling through India, was offered a considerable order if terms were the same as those of a certain firm bearing a German name established at Lyons and Paris. The order was duly sent to London, and the greater part of it was found to be impossible of execution at anything like the rates named. Quotations were therefore asked from the Lyons firm, and the reply showed that the Indian druggist had in no way misrepre-

sented our Franco-German competitors. The following specimens will show the style of prices current which this firm finds suitable for the Indian market:—

Calomel, 10l. 10s. per case of 125 vials of 420 grammes each
= 1s. 9d. per lb.
Bismuth, pure 100 per cent., 7s. 5d. per lb.
" mixed 70 per cent., 5s. 4d. "
" 50 per cent., 4s. 2d. "
Packages free, c.i.f. Calcutta or Bombay.

Samples were thereupon requested, but though a month has elapsed since these were applied for none have come to hand.

The *Union Pharmaceutique* translates from our educational number the scheme of the Preliminary English Preliminary examination, and adds the following comments:—"It will be seen that the programme is not very dreadful; it simply demands a fair primary education, including a little history, but without geography, finished off with a little Latin, enough for the needs of the profession. Practical arithmetic occupies a preponderant position. This balances the general inferiority of the examination in its literary character to our own grammatical test. It is worthy of remark, however, that England maintains the study of Latin as indispensable in the practice of pharmacy."

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The Chemists' Assistants' Association. The programme for the new session of the Chemists' Assistants' Association has been issued. The inaugural address by the president (Mr. H. H. Millhouse) is to be delivered on Wednesday evening next, October 13, at the Association's rooms, 103 Great Russell Street. At the next meeting, on October 20, Mr. T. S. Dymond, vice-president, will open a discussion on Pharmaceutical Education and Examination. On subsequent evenings there are to be sometimes papers and sometimes musical and social gatherings. The papers already announced are on "Richard Brinsley Sheridan," by Mr. Heward; "Laboratory Notes," by Messrs. Braithwaite and Farr; "Methods of Preserving apparently worthless Teeth and Roots," by Mr. C. J. Rathburn, D.D.S.; "Pasteur's Work in relation to Zymosis and Antiseptics," by Dr. H. Macnaughton Jones; and "The Official Liquid Fixed Oils," by Mr. T. A. Elwood. This committee announce a "Burroughs-Wellcome Prize" of 5l., together with a silver medal presented by the Association, for the best paper from a member of the Association describing improvements in the art of pharmacy, to be sent in before December 1. The following gentlemen form the council for the new session:—Mr. H. H. Millhouse (president), Messrs. J. F. Burnett and T. S. Dymond (vice-presidents), Mr. W. R. Dodd (hon. treasurer), Messrs. W. Bland Botham, 14 Holborn, and E. H. Farr, 50 Southwark Street (hon. secretaries), and Messrs. A. A. Deck, A. J. Phillips, W. Rushton, J. E. Saul, J. H. Shacklock, C. J. Strother, E. S. Taylor, and R. Winfrey.

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Chemical Gases. A correspondent of the *Irvine Express*, who is defending the chemical manufacturers of that town, declares that the escape of vapour is under stringent supervision at all the works, and is kept well within the legal allowance. Nevertheless, he estimates that 8 tons of hydrochloric acid and 5 tons of sulphuric acid vapours escape weekly. This quantity, judiciously applied, he recognises, could seriously damage the gardens of the locality, and the health of the population as well; but he maintains that what damage is done is much more likely to be occasioned by the foul gases from the fuel. At a moderate estimate he says the fuel consumed in the town contains sulphur enough to produce upwards of 50 tons of sulphuric acid per week. This, however, is only a small item compared with the smoke, &c., which accompanies it, and which contains many other substances deleterious to animal or vegetable life; in fact, about 100,000 tons, or over 2,500,000,000 cubic feet, of irrepirable gaseous products of combustion are poured into the atmosphere of the town every week.

Personalities.

MR. J. ATKINS has succeeded to the business lately carried on at 44 Wind Street, Swansea.

THE reference to Mr. H. C. Mason in last week's Indian letter should have been to Mr. F. S. Mason.

MR. F. E. BILSON, from Messrs. J. Bell & Co., has purchased the business of Mr. Atkins at 1 Lansdowne Crescent, Bournemouth.

W. G. GEORGE has again defeated Cummins, this time in the ten-mile handicap. It is not generally known in the drug trade that George served his apprenticeship with Mr. Fearnley Tything, Worcester, afterwards becoming assistant to Messrs. H. Long & Son, pharmaceutical chemists, Brighton.

MR. WOOTTON, chemist, Luton, met with a rather severe accident last week. He was assisting in the decoration of a schoolroom, when a form on which he was standing gave way, and the fall caused the fracture of two ribs. Mr. Wootton is in his seventy-second year, and the shock was therefore severe, but we are glad to hear he is doing well.

MR. ROBERT B. WARRICK has resigned his interest in the business carried on under the style of Warrick Bros., perfumers, Old Swan Lane, Upper Thames Street, London, E.C., in favour of his nephew, Mr. Arthur Warrick, and his son, Mr. Frederick Walmsley Warrick. The former has had a special experience in the manufacture of perfumes, he having been for some years senior partner in the firm of Warrick Frères, of Grasse; the latter is a pharmaceutical chemist, and besides having been associated for some years with the London firm, had a practical training in the Pharmacie Centrale of Paris. The firm of Warrick Bros. was established about sixty years since, by John Warrick, who became agent for Pelletier, of Paris, and sold the first ounce of quinine in England, the purchaser being the late Mr. Morson. The firm subsequently established a factory in the South of France for the preparation of the raw materials of perfumery. They also claim to have introduced jujubes and capsules from France, and in 1877 bought the lozenge business of Lucas Bros.

OBITUARY.

ADAMS.—At Salcombe, September 30, James Henry Adams, chemist and druggist, after a long and painful illness. Aged 51. Deeply lamented.

BENNETT.—On September 30, at 14 Union Street, Plymouth, Richard Morison Bennett, chemist and druggist.

DEARNEY.—On September 14, Mr. William Robert Dearney, chemist and druggist, Stanmore. Aged 29.

EDMONDS.—On September 15, Mr. Benjamin Morris Edmonds, chemist and druggist, Lowestoft. Aged 74.

FAIRBANK.—On Sunday, September 26, at 592 Holloway Road, Mr. William John Fairbank, chemist and druggist. Aged 23.

FARIE.—At Strathallan Villa, Bridge of Allan, N.B., on October 2, Gilbert Farie, pharmaceutical chemist. The deceased was in business in the Bridge of Allan for many years, and for some time had a branch at Callander. Both places being fashionable summer resorts, Mr. Farie was for some time very successful, but latterly, owing to feeble health and property investments, he suffered a reverse, which, it is feared, has hastened his end.

HEATON.—On September 19, Mr. Wilmer Everard Heaton, chemist and druggist, Nelson. Aged 31.

JOHNSON.—On September 17, Mr. George Thomas Fortin Johnson, chemist and druggist, St. Leonards. Aged 81.

MASSER.—On August 26, Mr. Arthur Harry Masser, chemist and druggist, Foleshill. Aged 47.

MUSKETT.—On September 5, Mr. Charles Muskett, pharmaceutical chemist, Diss. Aged 63.

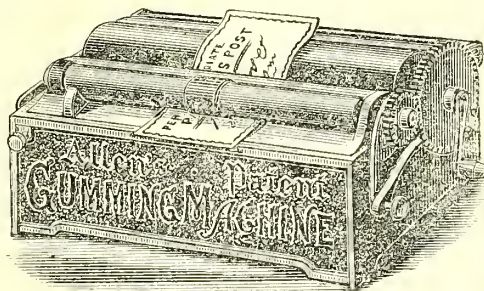
WHITE.—On September 7, Mr. Daniel White, pharmaceutical chemist, Regent's Park, London. Aged 85.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]



GUMMING MACHINE.

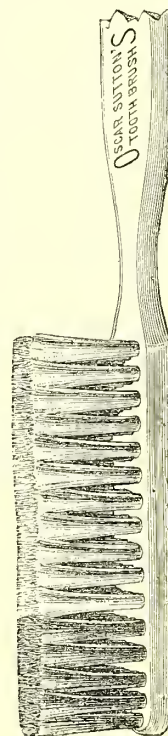
THE Allen Machine Company, Halifax, have designed and introduced a very pretty and ingenious machine for gumming labels. By this apparatus a perfectly uniform layer of gum can be applied to the back of a label with neither dirt nor waste. The arrangement is equally applicable to the gumming of edges of post-wrappers, &c. By introducing the label, as shown in the drawing, underneath the revolving

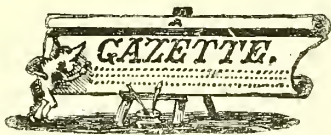


roller and turning the handle, the label is drawn over a cylinder which is always damp with gum, and by a simple modification the proportion of gum applied to the label can be easily varied. Where labels are used on a large scale this machine is likely to be appreciated; at all events it is worth examining.

O. S. TOOTH BRUSHES.

MESSRS. OSCAR, SUTTON & Co., of Boston, have introduced a new tooth brush, in which a successful effort is made to strengthen the most important part of the brush, viz. the point. This is accomplished by tipping the brush with unbleached bristles, the rest of it being of the ordinary kind, as shown in the illustration. The makers have two objects in devising this new brush. The first, as mentioned, is to strengthen the point, and the second is to afford in one setting of bristles an article suitable for use as a palate brush and yet capable, owing to its size, of being effectually used for the front teeth. Owing to the strong nature of the tip bristles and the manner in which they are secured, a considerable amount of work can be put upon the brush in using it for cleaning molars, and it is evident that the combination of this "palate" part in a brush of plain shape is a distinct advantage. The brush retails at regulation prices.





PARTNERSHIPS DISSOLVED.

SAYER & GILBERT, Monkwearmouth, chemists and druggists, and cement manufacturers.

THOMPSON, BROS. & CO., Market Building, Mincing Lane, and Mark Lane City, colonial brokers; as far as regards W. Farey.

RECEIVING ORDERS AND DATES OF PUBLIC EXAMINATION.

CHITTEY, EDWARD JONES, Birmingham, Worcester, Kidderminster, Bridge-north, and Pershore (late carrying on business as Eskell & Chitty, at Birmingham, Cheltenham, Leamington, Coventry, Newcastle-under-Lyme, and Shrewsbury), dentist. Nov. 3. Birmingham.

EDGE, WILLIAM RICHARD, Salford, medical plaster manufacturer. Oct. 13. Salford.

FERGUSON, WILLIAM KENNEDY, & WETHERELL, THOMAS WILKINSON, Leeds, chemists and druggists and electro-platers. Oct. 19. Leeds.

ROBERTS, THOMAS, Holyhead and Brynsiencyn, Llanidan, Anglesey, chemist. Nov. 4. Bangor.

FIRST MEETINGS.

ATTHILL, W. E. B., Surbiton, Surrey, doctor of medicine. Oct. 11. 28 and 29 St. Swithin's Lane, E.C.

LAUTER, ISAAC, jun., Mile End Road and Glasgow, sponge merchant. Oct. 21. 33 Carey Street, Lincoln's Inn.

ROBERTS, THOMAS, Holyhead and Brynsiencyn, Llanidan, Anglesey, chemist. Oct. 11. Official Receiver's Office, Chester.

TURNER, JOSEPH, Hawarden, Flintshire, manufacturing chemist. October 11. Official Receiver's Office, Chester.

ADJUDICATIONS.

ATTHILL, W. E. B., Surbiton, doctor of medicine.

KING, APPELEY, Deal, surgeon dentist.

SCOTTISH BANKRUPT.

WELCH, GEORGE MURRAY, 63 Inverleith Row, Edinburgh, chemist and druggist. Div. on Nov. 8. Chambers of William James Caesar, 4A St. Andrew Square, Edinburgh.

NOTICES OF DIVIDENDS.

ANGUS, JOHN (trading as John Angus & Co.), Ingram House, Fenchurch Street, Nevorn Square, South Kensington, and Moor House Abbey, St. Bathans, Berwick, chemical broker. Composition of 2s., any day except Saturday. Chief Official Receiver's Office, 33 Carey Street, Lincoln's Inn.

CONCANNON, AUSTIN, Stockport, physician and surgeon. Div. of 2s. 2d. forthwith. Official Receiver's Office, Macclesfield.

PRAET, FREDERICK, Appledore, Northam, Devonshire, surgeon. Div. of 9s. Oct. 6. Official Receiver's Office, Taunton.

TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, within two months of the date of this journal, give notice in duplicate at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." All communications relating to patents, designs, or trade-marks to be addressed to H. Reader Lack, Esq., Comptroller-General of Patents, Designs, and Trade-marks, Patent Office, 25 Southampton Buildings Chancery Lane, London, W.C.

From the "*Trade Marks Journal*," October 6, 1886.

"MRS. DR. ANNIE LONGSHORE-POTT'S POWDERS"; for medicinal powders and other similar substances. By George E. Harrison, 32 Dorset Square, Regent's Park, N.W. 52,864.

"SUNLIGHT," the "Self-washer Tablet," on plain label; for perfumed soap (50,670). "Sunlight Self-washer Soap," in centre, and other wording, in Oxford border of label; for perfumed soap (52,802). "Lever's Free and Easy Washer," on fancy label; for common (52,805) and perfumed (54,024) soap. By Lever Brothers, Warrington.

"EMPRESS" (51,703); "Gossage" (51,766); "Fragrant," on floral design (51,883); "Gossages' Imperial Crown Soap," on fancy label (52,669); "Viceroy" (52,716); "The Viceroy" and monogram (52,851); all for perfumed soap. "Gossage" (51,765); "Gossages' National Blue Mottled" (51,874); the same on label (51,875), also in stencilled letters in circle (51,876); "Gossages' Fragrant Windsor Soap" (51,880), and same on two kinds of labels (51,879-81); "Fragrant," on floral design (51,882); "Gossages' Imperial Crown Soap," on label (52,668); "Viceroy" (52,716) and "The Viceroy" and monogram (52,850); all for common soap. "Gossage," for carbolic soap for veterinary purposes (53,793). By William Gossage & Sons, Widnes.

"PILKINGTON'S WEAVER'S TABLET, PRESTON," on label; for perfumed soap. By William Pilkington, trading as The Preston Soap Company, Sizer Street, Preston. 53,125.

"KEELING'S PURITY SOAP"; for common soap (53,183); and "Sweet Hawthorne"; for candles, soap, detergents, &c. (53,190). By D. C. Keeling & Co., Blundell Street, Liverpool.

"HAZLEHURST & SONS" (53,370-1); figure of the sun with star, and monogram in centre (53,376-7); "Sun, Hazlehurst & Sons," other wording, medals, &c., on four panelled label (53,388-9); "Marigold" (53,398-9), and "Cowslip" (53,400-1); for common soap and perfumed soaps; and "Pearl" (53,385); for perfumed soap. By Hazlehurst & Sons, Camden Soap and Alkali Works, Runcorn.

"GRIFFITH'S TOOTHACHE LINT"; for medicated lint. By Charles Griffith, Hadleigh, Suffolk. 53,485.

"EDGE'S FILTERED BLUE"; for blue for laundry purposes. By William Edge, Brownlow Fold, Bolton. 53,671.

"PARAGON" (54,409-10); "Mikado" (54,411-2); "Meteor" (54,421-2); "Talisman" (54,427-8); Cupid's head upon a heart (54,431-2); a winged wheel (54,433-4); "Sea Foam" (54,435-6); for common and perfumed soap. "Comet" (54,424); for perfumed soap. By John Crosfield, trading as Joseph Crosfield & Sons, Warrington.

"KINLOCK, CAMPBELL & CO., CLAN PALE," on label; for common soap. By Kinlock, Campbell & Co., 35 Robertson Street, Glasgow. 54,856.

"CABUL" (54,952), and "Mogul" (55,319); for sauces. By Crosse & Blackwell, Soho Square, Middlesex.

"MONKEY BRAND" (55,056); for common soap. Also for a preparation for cleansing furniture, cutlery, &c. (55,057). By Benjamin Brooke & Co., Philadelphia, United States of America, and Queen Victoria Street, London.

"WILSONIA"; for ointment for human use. By Christiana Wilson, 378 Stretford Road, Manchester. 55,303.

MEETING OF COMPANY.

HENRY LAMPLOUGH (LIMITED).—The first ordinary general meeting of this company was held on October 5, at the First Avenue Hotel, High Holborn, Mr. Henry Lamplough presiding. The report stated that the company's business for the three months ending August 31 last showed a profit on the trading more than sufficient to pay a dividend at the rate of 10 per cent. per annum on the paid-up capital. In answer to questions the chairman stated that the shares were not all taken up, that the three months referred to in the report were June, July, and August, and that the directors had sufficient funds in hand already to pay a dividend at the rate of 10 per cent. on the first six months' trading. The shares had not all been applied for, but the directors have sufficient capital in hand to go on with the business; and therefore it is not proposed to issue any more shares for the present. Questioned as to whether the satisfactory returns of the first three months' trading of the company were not materially attributable to the great fall in prices of glass bottles and of the chemicals used in the manufacture of the company's specialties, the chairman admitted that there had been a very large reduction in the price of glass bottles. They used to cost 20s., they were reduced to 18s., and, in consequence of the introduction of Siemens's discovery as to the use of gas in the process of manufacture, the company had entered into a large contract at 12s. In regard to chemicals there had been a great reduction in the price of bicarbonate of soda. The chairman remembered that article at 2s. per lb., and very recently he had paid as low as 8d., but now it was 3d., and for a much better article.

Trade Report.

It should always be remembered that prices quoted in this section are as nearly as can be ascertained the lowest that are actually paid for bulk quantities. Considerable allowances have to be added in many cases before ordinary prices can be ascertained, and for many drugs it must be recollected the range of quality is very wide.

MINCING LANE, October 7.

THE October list of Messrs. Howards & Sons again quotes no fewer than twenty articles at lower rates. Among the articles which have cheapened are *Bromide of Ammonia*, reduced to 1s. 10d.; *Iodide of Ammonia*, to 13s. 6d.; *Iodoform*, to 14s. 4d.; *Bicarbonate of Potash*, to 33s.; *Bromide of Potash*, to 1s. 4½d.; *Carbonate of Potash*, to 23s. 6d.; and *Iodide of Potash*, to 10s.

ACID (BORACIC), easier in consequence of the decline in the borax market. The present price is quoted at 38s. 6d. per cwt., a reduction of 3s.

ACID (CITRIC).—Very little business has been done. Quotations vary between 2s. 1½d. and 2s. 1¾d. per lb.

ACID (TARTARIC).—More firmness is shown in the market, and *English acid* is quoted at 1s. 6¾d. per lb., *Foreign* makers asking the same price.

ALUM.—The home trade demand is very active, and the price is well maintained at 5l. 10s. for loose lump and 6l. 2s. 6d. per ton for ground in bags or store. The export demand is also somewhat more active.

BLEACHING POWDER.—A further advance has taken place since our last report, and we now quote at 8l. 5s. ex warehouse. The demand is good and the spot supply limited.

BORAX is now quoted at 25l. 10s. for *English*, and 24l. 10s. for *Foreign*, but in the latter variety there is but little doing, owing to the continued reduction in the price of the *English* article. There is a fair demand.

GLYCERINE is again dearer, 60l. per ton being now quoted for German of 1,260 s.g. There is a very general anticipation of a further advance as the winter season draws nearer. The *Chemiker Zeitung* has received some particulars from a correspondent with reference to the report recently promulgated that a syndicate of speculators in glycerine was in contemplation. The correspondent does not believe that such a syndicate, contemplating the purchase of all glycerine at present on the market, has been or will be formed. Those firms in Germany, England, and France which dispose of the capital necessary for such an undertaking, and which have handled glycerine for years, are not likely to run the risks of a speculation which would be doomed to failure. The present rise in crude glycerine, which has advanced 50 per cent. within a few months, has been caused by American purchasers. In the United States refined glycerine pays 5c. duty per lb., while crude glycerine is admitted at 2c. per lb. This tariff is framed to exclude the import of the refined article and so to back up the American refineries. These refineries cannot find sufficient material for their requirements in the States, and are consequently in the habit of buying large quantities in Europe. Within the last few months these purchases have been exceptionally large, partly because the summer is considered the best time for laying in stock, and also because the improved prospects of the Panama Canal are thought likely to lead to a more vigorous pursuance of the operations on the Isthmus and consequently to a large increase in the consumption of dynamite. It is but natural that the American purchases should have caused a rise, and it is extremely likely that some Continental firms should have followed suit and bought in excess of their immediate requirements.

MURIATE OF AMMONIA.—The price of *rough* has declined to 23l. per ton, but *white* remains unchanged at 28l.

POTASH.—*Bichromate* maintains its previous price of 3½d. per lb. *Chlorate* has been in better request, both for spot and forward delivery, and the supplies are rather limited just at present; 6½d. to 6¾d. per lb. is the present quotation. *Prussiate* is neglected at 7¼d.

QUICKSILVER still remains held at 7l. 10s. by the importer, but second-hand holders sell at a somewhat lower figure.

SALTPETRE.—The London market is quiet, with buyers at 15s. 9d. per cwt. for quantities. Parcels for arrival are offering at 16s. per cwt. On September 4 the Calcutta market was steady at unchanged prices from last quotations. Stocks on the spot were about 8,000 to 9,000 bags of all sorts, and some small lots of new crude saltpetre were arriving. The London stock is now 1,438 tons, against 3,172 tons at this time last year. *English Refined* is quoted at 21s. per cwt. for barrels, or 22s. per cwt. for kegs.

SODA.—*Ash* is selling in small quantities at 1¼d. per degree landed; there is said to be a rather better demand for export. *Bicarbonate* is steady at 7l. 5s. to 7l. 10s. per ton landed, a fair trade being transacted. The improved demand for *Caustic* continues, and prices are firmer, at 8l. for cream and 8l. 5s. per ton for 60 per cent. white. *Crystals* are scarce, and prices are rising steadily, 2l. 14s. being now quoted ex ship London, and 2l. 7s. 6d. on the Tyne. The market closes very steady.

SUGAR OF LEAD is scarce on the spot and sells readily at 22s. 6d. to 23s. 6d. per cwt. for best white.

CINCHONA BARK.—The total quantity offered in public sale on Tuesday again showed an increase, numbering 3,651 packages, against 3,379 catalogued on September 21. The demand for all varieties (South American excepted) was fairly good, and nearly the whole of the East Indian cinchonas offered sold at previous rates, the average unit being 3d.

A few packages from the Indian mainland were sold at 1½d. to 1d. for ordinary sea-damaged branch to dull quill. A few packages bold druggist's quill of fair appearance fetched 1s. 2d. per lb.

Java cinchona continues to find a ready sale.

The South American bark offered in sale consisted mainly of new cuprea, to which, however, little attention was paid, only five serons selling at 4½d. per lb. New Granada brought 4d., and bright Columbian of old import 6d. per lb. A public sale of cinchona took place at Amsterdam on September 29, when 1,285 bags and 550 cases Java bark were catalogued. The whole was disposed of at firm rates, the unit averaging 13 cents to 15 cents (2½d. to 3d.). There was a good show of excellent druggist's quill, and some lots of *Calisaya Schuhkraft*, fine mossy quill, sold at 2l. 35c. per ½ kilo (= 3s. 6½d. per lb.).

BALSAM CANADA is quoted at 1s. 6d. to 1s. 8d.

BALSAM CAPIVI.—Until now prices remain unchanged, but the demand has shown much more activity lately, probably owing to the reports from America indicating a considerable diminution in the supply.

CAMPHOR.—The market remains quiet and no transactions are heard of. We quote crude: *Japan* at 67s. 6d. to 70s. per cwt., and *China* at 65s. per cwt. At the end of August it was reported from Hiogo that steadily advancing prices offered by buyers, both European and Chinese, had caused supplies to continue on a more liberal scale than is usual during August, and holders have been willing sellers. Arrivals, 1,900 to 2,000 tubs, were all taken, either "to arrive" or immediately upon arrival, at \$19.75 to \$20.50 (69s. 3d. to 72s. per cwt.) per picul. Of this the Chinese took 900 tubs. During the last days of September arrivals had been rather light again, and the market was entirely in the hands of one buyer. Total arrivals were fully up to those of the whole of last year, and liberal supplies were expected from September to October next.

JUNIPER BERRIES.—From Italy we hear that with a very small crop and a good speculative demand price for new has advanced up to the equivalent of 7s. 6d. per cwt. f.o.b., whilst 6s. 6d. is now required for old berries.

LIQUORICE PASTE.—A good demand has prevailed for *Smyrna* brands (VB and BX), but the quotations still remain unchanged at 43s. 6d. to 47s. per cwt., according to quality.

OILS (ESSENTIAL).—*Aniseed* is dull, and, privately, sales have been made at 6s. 2d. per lb., but owners now require 6s. 3d. per lb. In *Cassia* no business is reported; there is no demand for the article. *Cinnamon* also neglected. *Cinnamon leaf* sells slowly at 2d. per oz. *Citronella* continues in a very

inactive state on the spot, and there are willing sellers at 31-32*d.* per oz. *Clove* oil dearer, at 5*s.* 3*d.* to 5*s.* 6*d.* according to quality. *Lemongrass* is also neglected, and prices for this oil certainly seem advantageous to purchasers. The quality and yield of the Mitcham *Lavender* crop are very satisfactory. *Peppermint*: The English crop has been good. Japanese oil continues dull, while American is reported lower from New York. *Pimento* held at 15*s.*

OPIMUM.—The demand has grown decidedly brisker, especially for soft shipping qualities of the new crop. Business has been done at 10*s.* to 13*s.* for *Persian*, 11*s.* 6*d.* for good *Tokat*, and 12*s.* for new crop *Malatia*. In druggists' kinds there is very little doing. Arrivals in Smyrna from the interior this year turn out smaller than anticipated.

STROPIANTUS HISPIDUS.—Our market has been quite bare of this drug for a considerable time, but on Thursday morning a box of seed, leaves, root and bark came to hand. The consignees are Messrs. Thomas Christy & Co., who inform us that, for retail buyers, they have raised the price of the seed from 5*s.* to 7*s.* per oz. They purpose to have the leaves, root, and bark examined for pharmaceutical purposes.

CUTCH.—The following are the current quotations: *M.M.* in slabs, good hard, 28*s.*; *Coch.* 27*s.* 6*d.* to 28*s.*; *Elephant*, 25*s.* 6*d.* per cwt. Of the *W two stars* brand nothing is offering here. The supplies of this mark at Liverpool are held at extreme rates. In Liverpool a steady demand has prevailed lately, and prices show a further hardening tendency.

JAPAN WAX.—Good hard squares are selling privately at 55*s.* per cwt. In Japan, according to latest mail advices, considerable business has been done on the basis of \$15.60 to \$15.70 (= 54*s.* 9*d.* to 55*s.* per cwt.), at which price 1,500 piculs have been done, principally for Europe. Market closes firm with stocks somewhat reduced; favourable bleaching weather continues, however, and at present rates Japanese are willing sellers.

GALLS (Turkey) firmer, with sales of fair to fine blues at 55*s.* to 56*s.*, and now more money asked. In *China* a small business done at 53*s.* to 54*s.* per cwt.

SAFFLOWER is quoted at 92*s.* to 120*s.* for good to fine and 80*s.* to 90*s.* for ordinary to middling quality.

SHELLAC.—Prices have fully maintained the late advance in Tuesday's auction. A larger supply was brought forward, many owners being desirous to take advantage of the improvement in the market. The following are the prices obtained at the sales:—*Second Orange*, good bright, SS in diamond 53*s.*; good quality, HB in house 53*s.*; good quality, I in diamond 52*s.*; good quality, MJ in diamond 51*s.* to 52*s.*; good quality, MM in double triangle 52*s.*; good quality, HB in octagon 51*s.* to 52*s.*; BB double triangle and AT triangle fair reddish 51*s.*; GA diamond fair to fully fair 49*s.* to 52*s.*; TN fair 50*s.* to 51*s.*; part unworked, livery 49*s.*; PPG diamond 49*s.* to 50*s.*; DA&Co. triangle fair 49*s.* to 51*s.*; WBSC house livery 49*s.*; Liver NR at 46*s.* *Garnet* realised 51*s.* to 52*s.* for good free, and 50*s.* for out of condition; fair AT and mixed KMB sold at 48*s.*

The following are the prices for button lac:—RBBL, fine first blood 64*s.*; good second 58*s.*; darkish second blood 54*s.*; fair third 47*s.*; fourth 37*s.* to 38*s.*; PBBL strong third 47*s.*

The improved position of shellac has received a considerable impetus by the publication of the stock-lists, showing a favourable statistical position, and it appears that speculators are again taking up the article.

COTTONSEED OIL.—The market has further receded, and crude oil can now be had at 15*s.* 5*s.* in London. Refined on the spot is worth 17*s.* 10*s.* to 19*s.*, according to make and packages, and in Hull for casks 16*s.* 15*s.*, with November-April at 16*s.* 12*s.* 6*d.* to 16*s.* 10*s.* *Crude*, 14*s.* on the spot, or per November-April. In Liverpool 18*s.* 3*d.* to 18*s.* 9*d.* per cwt. is quoted for Liverpool refined. From New York we hear under date of September 21 that *crude* oil was offering there in stray lots at 30*c.* to 33*c.* according to quality, the last-named price representing prime oil. There was talk of new crop oil, but none had made its appearance as yet on Change, although 50 barrels arrived within the last few

days. No fresh business was reported either at New York or in the South. The fact of two or three more important mills having been absorbed by the combination lately has served as a topic for discussion, and it is agreed that the control of the industry as at present concentrated will place a new complexion on the situation.

LINSEED OIL.—The decline in value has continued both here and at Hull. In London the spot prices show the greatest fall, viz., 15*s.*, while forward delivery is from 2*s.* 6*d.* to 5*s.* lower; in Hull, on the other hand, the spot price has fallen only slightly, but forward delivery shows a fall of 22*s.* 6*d.* to 25*s.*

OLIVE OIL.—We hear from the Naples district that good rains have fallen there during the last fortnight, and have been followed up by fine cool weather, which is most favourable to the olive trees, and the bulk of the olives being sound and large, a good crop result may now be anticipated with some degree of certainty. With improved crop prospects, holders have been more willing to realise, but the Russian demand for immediate shipment being still fairly active, prices have remained without any marked change. For England little or nothing is doing, and unless a better demand sets in shortly, there is much cause to apprehend a drop in prices as soon as the season for shipment to the Baltic is over. In the north of Italy the crop prospects are reported less favourable, a large proportion of the fruit having dropped, and the oilworm (*daeus olivæ*) being very frequent. In Genoa the market is very calm. The London market is steady, but there is little doing except in *Mogadore* which is the subject of a good deal of speculation and closes very firm at 32*s.* 15*s.* to 33*s.* In Liverpool the quotations are 34*s.* for Smyrna and at 37*s.* 15*s.* to 38*s.* per ton for Taranto.

PALM OIL still held at 23*s.* for fine *Lagos*.

PETROLEUM.—*American oil* shows no change, quotations still remaining at 5½*d.* to 5¾*d.* for spot stuff, 5½*d.* to 5¾*d.* for October-December, 5½*d.* for November-December, and 5½*d.* to 5½½*d.* for January-March. Business remains restricted, and is almost confined to the limited trade-orders that the large quantity of oil contracted for permits. On September 30 the stock in London was 103,494 barrels, against 72,706 barrels on the same date last year. The *Oil, Paint, and Drug Reporter*, reviewing the market on September 21, states that the news from the oil region continues to be of a bearish character. The large production of the Washington field, ranging from 17,000 to 18,000 barrels per day, with more wells on important locations to come in, is a formidable obstacle to the bull party, as is also the increase at Shoustown. The total sales for the week foot up 25,205,000 barrels. *Russian oil* is quoted at 5½*d.* to 5¾*d.* for spot stuff of different brands, and 5¾*d.* for November-December or January-March.

TALLOW shows a further decline. Present quotations are for P.Y.C. on the spot 27*s.* 9*d.* Australian, good to fine mutton 24*s.* 6*d.* to 26*s.* and 26*s.* 6*d.* for special brand; good to fine beef 21*s.* 9*d.* to 23*s.* 6*d.*

TURPENTINE.—The prices of our last report have not been quite maintained, but at the close the market is again steadier: American spirits, spot 28*s.* to 28*s.* 3*d.*, October 28*s.* to 28*s.* 3*d.*, October-December 28*s.* 3*d.*, January-April 28*s.* 6*d.*

ARROWROOT.—*St. Vincent* sells at 2½*d.* per lb. A parcel *Natal* bought in at 4¾*d.* per lb. Reports from the north of Queensland, writes our Australian representative, under date August 20, show that last year's stocks of arrowroot are not all cleared off, while this year there is a good crop, and an increased area to crush. The digging and manufacturing is now in full swing. The heavy duties imposed in Sydney and Melbourne have induced some speculators to try the English market. When this was last attempted, some years ago, the result was disastrous to the shippers.

CASSIA BUDS are dearer and sold at 35*s.* to 37*s.*, according to quality.

CLOVES.—Advices by cable have come in stating that the *Zanzibar* crop is a very short one, and consequent upon these reports the market has suddenly assumed a firmer appearance and a considerable speculative business has been done at advancing prices. In public sale on Wednesday 100 bales

Zanzibar were sold:—Ordinary $9\frac{1}{4}d.$, fair dull $9\frac{3}{4}d.$, good to fine bright $10d.$ to $10\frac{1}{4}d.$ *Ambony* cloves are quiet, and 177 bags were bought in at $9\frac{3}{4}d.$ to $10d.$ Of 24 cases *Penang* 4 cases fair quality sold at $11d.$ Our stock of all kinds has been reduced to 8,193 bales, barely half of what it was a year ago. During the current year 9,375 bales have arrived at London, against 23,597 bales during the first 38 weeks of 1885.

CLOVE STEMS quoted at $1\frac{1}{4}d.$ per lb.

GINGER.—The market for *Cochin* is quiet, and the only varieties which continue to sell steadily are the smooth cut and bold rough sorts. The inferior and medium qualities are very plentiful. *Bengal* ginger is obtainable at $6d.$ decline, viz. $15s. 6d.$ per cwt. for fair quality. *Jamaica* sells at full rates for good qualities. Good washed is worth $54s.$ *African* and *Japanese* varieties are neglected. Our stock of all varieties is 29,187 packages, against 31,116 packages at the corresponding period of 1885.

PEPPER (BLACK) has been in good demand, with sales at rather higher rates. In Wednesday's auction 1,441 bags were partly sold, at $7\frac{1}{4}d.$ per lb. for good *Penang*, and $8\frac{1}{4}d.$ per lb. for good *Singapore*. We hear from *Singapore* under date of September 8 that dealers find great difficulty in filling their outstanding contracts, and some trouble is expected in connection with September engagements. The next crop is expected to be early.

PEPPER (*white*).—Prices are maintained, but there is not very much doing in the article. At auction 123 bags *Singapore* were bought in at $13\frac{1}{4}d.$, also 120 bags *Siam* at $13d.$ Of 323 bags *Penang* 70 bags fine unlimed sold at $11\frac{1}{4}d.$, the remainder, limed, bought in at $11\frac{3}{4}d.$ On September 8, there were moderate supplies of white pepper on the market at *Singapore*, but the price had declined considerably, and at the close values were rather uncertain.

PIMENTO again lower. Good *Jamaica* sells at $2\frac{3}{4}d.$ per lb.

THE AMERICAN MARKETS.

NEW YORK, September 25.

OUR drug market has been active and buoyant during the month, and with few exceptions an advance has been established for most of the prominent articles. Next month and November are two of the busiest months in the year for the home trade; the anticipated demand gives a "bullish" feeling to the market and foreshadows the continuance of a strong and upward movement.

The prices sterling (in parentheses) are what the different articles would cost delivered in London, all market allowances, discounts, &c., being taken into account. Importers can, therefore, see at a glance the course of this market compared with their own.

CURACAO ALOES.—Just as our market was growing firmer an arrival of 500 boxes in one steamer took place. They have gone into store, being unable to find a purchaser.

BEESWAX.—The price appears to have reached bottom; good country wax is quoted $25c.$ ($6l.$).

BALSAMS.—A very large demand has set in for *Copaiba*, and, as arrivals are small, considerably higher rates have to be noted. Sales of *Pará* were made at $36c.$ ($1s. 7\frac{1}{2}d.$); bright *Maranhão*, $34c.$ ($1s. 6\frac{1}{2}d.$); *Maracaibo*, $32c.$ ($1s. 5\frac{1}{2}d.$); there is no stock in first hands, and still higher rates are expected. *Peru* has also improved, none in the importers' hands, while holders quote $\$1.30$ ($5s. 9d.$). *Tolu* very active and in brisk demand; purchases have been made in London for American account. There are only a few holders here of any quantity, and they ask $35c.$ ($1s. 7d.$). *Canada* is again cheaper; prime bright is quoted $24c.$ ($1s. 1d.$).

BARK.—*Angostura* in large supply, but meets with no inquiry. *Condurango* stock exhausted by Germany, last price $13c.$ ($1s. 2\frac{1}{2}d.$). *Simaruba* also all taken by Hamburg, no quantity left. *Cascara Sagrada* is dearer at $6\frac{1}{2}c.$ ($36s.$).

TONQUIN BEANS.—Sales take place in a small way of *Angostura* at $\$1.25$ ($5s. 6d.$), but the great bulk of the enormous stock is firmly held by one firm at $\$1.50$ ($6s. 6d.$). *Paras* are scarce, no cheap grades offering.

LEAVES.—Large sales of *Huanuco Coca* have taken place for manufacturing, aggregating 50,000 lbs., the price has been kept private, but is believed to be $25c.$ ($1s. 1\frac{1}{4}d.$); although our market has been relieved of this large quantity it cannot be said to have improved yet. *Damiana* are offering at $20c.$ ($11d.$) for green Californian. *Jaborandi*.—Only one parcel of good leaves is to be heard of: for these $14c.$ ($7\frac{1}{2}d.$) is demanded; *Matico*, no stocks.

ACETATE OF LIME.—Manufacturers are sold up to December, but are now looking for contracts to run over 1887. The lowest price demanded for brown 68 per cent. is equal to about $9l.$ c.i.f. terms. High prices are expected to rule.

ESSENTIAL OILS.—There has been an active inquiry for *Aniseed*, caused by a scarcity on the spot, and as high as $\$1.70$ ($7s.$) has been paid. *Cassia* is flat at $60c.$ ($2s. 4d.$). *Sassafras* is without change at $38c.$ ($1s. 8\frac{1}{4}d.$). *Spearmint*.—New crop will be small, and high prices are expected; $\$5.50$ is generally demanded. *Wintergreen* is very scarce, and daily tends higher; this week $\$2.10$ ($9s.$) was paid for tins.

POTASSIUM BROMIDE is without change, but meets with little inquiry for export, $32c.$ ($1s. 4\frac{1}{2}d.$, 5 per cent.).

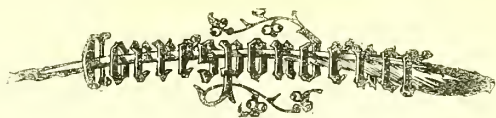
ROOTS.—*Golden Seal* meets with large inquiry, stocks are getting low and higher prices prevail, $15c.$ ($8\frac{1}{4}d.$). *Jalap* meets with no attention; holders are waiting for better times. *Kava kava* is cheaper at $28c.$ ($1s. 5d.$). *Senega* does not meet with much attention, the low prices perhaps deter purchasers from laying in stock in the hope of seeing it lower. The season for collecting is over, and all the root is now in store; prime bright Western is quoted $44c.$ ($2s. 1d.$) for selected, and $42c.$ ($2s.$) for good. The market has been overrun with root from Manitoba offering at $39c.$ ($1s. 10\frac{1}{2}d.$) and even less; it is generally coarse and clumpy. *Serpentaria* is scarce on the spot; the stock left in Texas is firmly held at $40c.$ ($1s. 11d.$).

SARSAPARILLA.—Very little demand for *Honduras*, which is in large supply (stock, 1,300 bales) and low in price; good quality can be had at $27c.$ ($1s. 3d.$). *Mexican*.—The speculator who cleared the market a few months ago, getting tired of holding at $10c.$ ($5\frac{1}{2}d.$), sold the bulk of his stock at a private figure, and it has gone into consumption. The demand is not active, but owing to the very small arrivals and high rates demanded in Mexico, our market is tending higher, and only needs a little stimulus to cause a considerable rise. Good Tampico is quoted $9\frac{1}{2}c.$ ($5\frac{1}{4}d.$), Tuxpan $9c.$ ($5\frac{1}{2}d.$).

SPERMACEI is in good demand, but with the coming of colder weather lower rates are expected. The market is $45c.$ ($1s. 11d.$), but probably less taking 100-ton lots.

QUININE.—The consumptive demand is falling off, and the tone of the market is towards lower rates. In a small way good German brands in 100-oz. tins have been selling at $48c.$ ($2s. 0\frac{1}{2}d.$).

OIL (PEPPERMINT).—During the early part of the month the weather both in Wayne County and Michigan turned out exceptionally favourable for the mint crop, and the immense injuries caused by the drought of former months were partially repaired; and although the total yield will not be the enormous one some would have us believe, it certainly will be larger than at first anticipated. Owing to the change in the prospects distillation was delayed, and is not yet completed. The buying, which was being actively carried on last week, at the price of $\$2.90$ ($12s. 3d.$) to the farmer, has stopped, and great efforts are being made to get the price down. The market here has been broken by small lots of doubtful quality, offering at $\$2.75$ ($11s. 6d.$), and considerable quantity for forward delivery at the same rate. All this has the effect for which it was intended—viz., to break the market, and keep consumers from purchasing. There can be little doubt the time is near at hand when buyers should lay in their stocks, and if they can secure supplies at about $\$30$ ($12s. 9d.$) for pure bulk oil, they will not be far out. When buying is again resumed in the growing district, it will not take long to secure the bulk of the oil, and then higher rates are sure to follow. The H. G. Hotchkiss brand is also being used as a "bear" instrument, and sells in a small way at $\$3.25$ ($15s.$).



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish.

Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Letters, queries, &c., not noticed in this issue will, if possible, be attended to next week.

Shop Hours Regulation Bill.

SIR,—After an experience of upwards of twenty years I am convinced that the hours during which a chemist's shop is open are unnecessarily protracted, and that there are comparatively few cases of urgent necessity among our late customers. They have got into the habit of coming late and will continue to do so as long as the shops are open. If that is the experience of others, reason will suggest shorter hours, but I fear that without the aid of an Act of Parliament it will be impossible to induce those of our brethren who keep open late on a weekday and take down their door shutters on a Sunday, on the chance of getting some stray pence, to close earlier. At a time when there is such keen competition, it is a very natural thing for a man to keep open late if his neighbours do the same, although he may be perfectly convinced that all the business he may do after eight o'clock could very well be done before that hour, and that his gas bill is needlessly heavy. It is in the poorer neighbourhoods more especially that the hours are most extended, and all the trades, chemist, grocer, butcher, baker, oilshop, &c., seem to vie with each other in keeping open late. When it becomes generally known that shops are closed at eight o'clock the public will naturally alter their habits and do their shopping earlier.

If one looks back not so many years he will call to mind what a vast improvement in the way of shorter hours has already taken place in our business, especially with the larger firms; improvement which many of the founders of our Society would have considered impossible, and I will be bound to say that there has been no diminution of business in consequence.

As the practice of medicine tends to become more scientific so much the more is required of the chemist, and a reasonable amount of rest and relaxation is absolutely necessary for him to keep himself abreast of the times.

I believe the proposed Bill, if passed, will, in the long run, be a great boon, and after it has been in operation a short time we shall be asking ourselves why we ever kept open so late. There is one objection which must be provided for. It might happen that when the hour struck the boy was absent on an errand and the chemist too busy to put up the door shutter himself, and as it is the custom of some people to leave everything to the very last minute, such an occurrence is likely to be pretty frequent. I am, sir, yours faithfully,

W. M. HOLMES.

Belgrave Mansions, S.W.

SIR,—Permit me to say a word in support of Sir J. Lubbock's Bill. Three years ago I had a business in a side street in a large city, and I generally found that the greater part of my business was done between 7 and 10 P.M., but I also found that of all those customers coming after eight o'clock, not one per cent. were really cases of emergency, and I should have been only too thankful if the law had compelled

me (and of course my fellow-chemists) to turn the key on the inconsiderate British public at eight o'clock.

I suffered so much when an apprentice and an assistant from long hours that I cannot forget it now that I am in a business of my own, and gladly support the early closing and weekly half-holiday in the town from which I write.

Faithfully yours,

WILTS. (222/46.)

SIR,—In accordance with your wish for the opinion of chemists and druggists on the early closing movement, I beg to say that I for one am entirely in favour of it. Situated as I am, a young man just commencing business, and trying to keep expenses down, with no assistance, I find it trying work to open at eight o'clock in the morning and to close about ten or eleven o'clock at night. Sir J. Lubbock's Bill would be just the thing for chemists in the same position as myself, who cannot leave work at any time, like other chemists in the same town, who keep an assistant or two.

Hoping it will not be long before the Bill becomes law,

I remain, yours respectfully,

LANCASTRIAN. (222/9.)

SIR,—As an assistant chemist and druggist I beg your advocacy of the early closing movement now advocated by Sir John Lubbock. In the town where I live we keep open until the most unreasonable hours. While the ironmongers', grocers', and drapers' assistants in the large shops are all at liberty at eight o'clock, my trade, supposed to be very respectable, keeps open until nine o'clock, and very often much later. This owing to the cupidity of one man (a fresh beginner), who, I think, never goes to bed, for his shop is open all hours, both morning and evening.

We hear of free libraries, &c., being opened for the working-man, but never anything for the poor chemist and druggist's assistant. The gentlemen who advocate the higher education should see first that the people have time to take advantage of the good things they are providing for them. Hoping the Bill will soon become law, I remain,

ONE WHO REQUIRES TIME FOR STUDY.

SIR,—It is with a great deal of pleasure, in reading the correspondence in your Journal, I see the almost complete unanimity that prevails amongst the chemists and druggists in favour of Sir John Lubbock's early closing Bill.

I have been in business myself for upwards of twenty years. The hours are now much longer than they were in the days of my apprenticeship. In my town the shops formerly were closed at eight o'clock; we have now drifted by degrees to nine o'clock. This is owing to one man, who keeps his shop open in the middle nights to half-past nine and ten o'clock, and to twelve and later on Saturdays.

If we can get the compulsory closing Act it would be one of the greatest blessings that was ever granted to a trade which is gradually drifting into nothing but slavery, without the proper remuneration to the tradesman for his services.

If England were canvassed through I am sure the great majority would be found in favour of the early closing movement.

Yours truly,

October 4.

PHARMACIE. (223/18.)

SIR,—I was very pleased to notice that the letters of Mr. Fitch and of "E. H. S." against the Shop Hours Regulation Bill have not been allowed to pass without adverse criticism from some of your readers. Both these gentlemen appear to think that this Bill would increase the burdens of the chemist. "E. H. S." somewhat illogically says that the framers of the Bill "seem anxious, not only to make his work" in serving late callers "more laborious than at present, but even to encourage late shopping, for in many instances he will have to run backwards and forwards between private door and shop in serving each customer," &c. Now it is to me by no means evident that if we were all compelled by law to put up shutters at 8 P.M., that the public would be so especially anxious to avail themselves of the permissive clause, and trouble us so much more at our private doors after, say, 10 P.M. than they do at present. I also question whether those of our number, who, like "E. H. S.," now appoint cer-

tain hours for Sunday callers, really get that undisturbed calm from side-door bell sounds in the interior that "E. H. S." seems to imply. Whether on the whole they have not more Sunday labour than those of us who wholly refuse to invite custom on that day, and who act on the principle that if John Bull really has the colic he will not be too nervous—open shop or closed shop—to seek our aid.

I know above a little of the private-bell nuisance, having to trot much oftener than I like out of my cosy sitting-room; but I rejoice to say that the nuisance is abating. I have been proprietor of this business over a dozen years in the midst of a dense artisan population—trade almost purely physis—largely prescribing—am the only chemist hereabouts resident on the spot—a few doors off a parasitic establishment selling patents a little over cost, &c. Surely a case here, according to "E. H. S.'s" and Mr. Fitch's theory, for being next to never shut.

I observe the plan of Sir John Lubbock's Bill. I close at 8 P.M., observe the holidays obtaining in other trades, am civil to late callers at my private door, but have a printed bill displayed in my passage giving ordinary hours of business—asking that calls out of those hours be limited to cases of necessity, and also stating that patents sold under price when the shop is open are charged at a higher rate when the shop is shut. The result is that, although my trade has nearly doubled itself, my late trade is getting beautifully less. My predecessor used to open on a Sunday evening. I have not opened at all. Yet in years bygone I have had forty or fifty rings at my private bell after 5 P.M.

I am pleased to say that my Sunday callers throughout the day can now sometimes be counted on my fingers, and that my late-callers on the week-day are not seldom very few.

VERBUM SAT. SAPIENTI.

SIR,—If one could be surprised at anything nowadays, those remarkable letters of R. O. Fitch and "E. H. S." should thoroughly open one's eyes. I was told on re-entering business on my return from India that I should find chemists the most narrow-minded of any class of tradesmen (may I say tradesmen, or has higher education and lesser profits made us professional men?), but I was not prepared to find anyone who would fight hard for ridiculously long hours, and then call on others to help them. S. Collis speaks of asinine resignation—I think he should rather have said mulish obstinacy—which in itself strikes me as showing as clearly as possible the necessity for some such legislation as that proposed by Sir John Lubbock. The artisan of England decides in the power of his trade unionism that his hours of labour shall be reasonably restricted; but Government in England protects the factory operative, and in India the coolie, against those who might exact too long hours; and the R. O. F.'s and E. H. S.'s of our trade compel us to ask of Government the boon which the artisan is strong enough to get for himself.

You, sir, speak of this proposed legislation as an entirely new departure. I, living as I do, amongst the workmen of Birmingham, can only see in it a protection against those very artisans who are strong enough to protect themselves, and their wives and daughters, whom, as factory operatives, our Government protects, and, so far from it promoting opportunities for tavern association, I am convinced that, were these people compelled to make their purchases earlier in the day, that much of their earnings, which now go to waste in the taverns, would be spent in legitimate food and clothing. This point would bear pushing much farther, for I am very much mistaken if it will not on investigation be found out that the latest hours are kept in the lowest and most criminal quarters of our large cities. Crime is a creature of the night, and if you compel her denizens to do their shopping in the daylight you are on the road to their moral uplifting.

One word more. You must be a homœopathist, or you would never attenuate so much as to speak of the necessity of a four-fifths majority, as against a two-thirds; it is more than splitting hairs to say that the decision of two out of three has not a right to rule, as well as four out of five. Were such fine points as these to be raised, our representative Government would become a chaos.

Many thanks to Sir John Lubbock and his co-philanthropists.

I am, sir, yours truly,

M. M. (223/28.)

High Street, Aston New Town, Birmingham.

SIR,—In response to your appeal for individual opinion upon Sir J. Lubbock's Shop Hours Regulation Bill as affecting chemists and druggists, I beg to say that the Bill meets with my fullest approval. Voluntary efforts have failed again and again to mitigate the slavery going on in the retail trade generally. It is nothing else but "bed and business"; that is my experience. Every hour is invaded, there is no opportunity for continued reading, conversation and other social enjoyments are interrupted, and even the last solitary hour before retiring to rest is ruthlessly broken into. And all this is endured for whom? Almost entirely for the careless, thoughtless, and selfish part of the community. Medicines required urgently I always serve cheerfully, but the continual demand for the numberless small articles supplied by chemists at unreasonable times ought to be checked, and as voluntary efforts fail to do so we are right, I think, in asking the legislature to protect us against our selfish neighbours. If such a Bill as this becomes law, we shall be the gainers in many respects, and I do not think we shall lose anything pecuniarily.

Yours truly,

G. H. ARIS.

SIR,—Though much indebted to you for the opportunity, there is some little doubt whether the ventilation in your columns of the question of early closing by Act of Parliament or otherwise will have a beneficial tendency; if it is the happy means of shortening the hours of toil for a class of men who certainly require this boon, so much the better.

It seems to me at first sight rather remarkable that those who pretend, and, I am bound to admit, with some reasonableness in the pretension, to labour in a sphere somewhat more advanced than that of a labourer or artisan, or even what we call a respectable tradesman or shopkeeper, should not feel convinced of the necessity of securing to themselves a moderate immunity from duties which are admittedly irksome and, valued by results, to some extent serious and responsible; but, strange as it may appear, the chemist and druggist is almost alone in this, that either the force of habit is so confirmed, or the innovation so strange and unaccustomed, or that the moment an effort is made to lighten somewhat the hours of labours of which he is always ready to complain, the necessity for strong and determined opposition apparently arises.

Fact, however, is stranger than fiction, and, curious as this may seem, we have evidence that such is and ever will in this unfortunate business be the case.

There surely cannot be a stronger argument for legislative interference than this—an acknowledged evil accompanied by manifest inability to devise a remedy.

To assume that public requirement compels a chemist to keep open shop until a late hour is a mistake; just as fairly might it be argued that he should never close his shop, for I have still to learn that people are taken ill at stated hours in the twenty-four and that such should not be the case at twelve o'clock at night as at nine.

The simple fact is we are all creatures of habit, and we may depend upon one thing, and that is, that if early closing became the rule and not the exception the public necessity, so called, would cease; that is to say, with the arrangements at present generally adopted for the public convenience, such as supplying medicines after closing hours, the public requirements would be met, and sufficiently met for all necessary purposes and comfort. To such questions as playing into the hands of storekeepers, tobacconists, and others, as being very problematical, I do not think it worth while to enter.

With the necessary safeguards, I have no hesitation in affirming that not only will the proposed legislation do good to chemists and druggists as a class, but will indirectly confer not only on themselves and their families an appreciable benefit, but will also for the first time allow men confessedly intelligent to take that social standing from which—deserving as they may have been up to this time—they, by the exigencies of an arduous and tedious profession have been utterly debarred.

But the question naturally, and I think properly, arises, would legislative interference do harm? either by lowering individual freedom or *locus standi* of the profession—if we may so call it, though I much doubt it—or on the other hand by curtailing the hours of business injure the calling of the

legitimate "chemist and druggist," and be the means of again furthering the interests of that multitude of outsiders who already "reap the harvest they have not sown?"

Sir, in my opinion, though I do not venture to assume to speak, as some do, for the trade generally, I think not. On the contrary, I consider it will be a benefit, the results of which will be further appreciated as time goes on, and be the means, and a very considerable means, of raising not only the status, but, what is as much wanted, the spirits of those to whom struggling and depression seem a heritage.

In conclusion, may I just add that much as a chemist and druggist may be conscientious, persevering, and industrious—in a word, wedded to his shop—there are certainly to my mind duties to his family, his neighbour, to the State, and to himself which are imperative, and which it behoves him not to neglect or despise, or, in default, a narrow, constricted, and generally unfortunate condition of mind, if not of body, is the result, alike deplorable and demanding our commiseration, if we look at such a one either individually, professionally, or socially.

Trusting that the days of emancipation may be speedily and safely consummated, I remain, sir,

Yours respectfully,

E. R. LEAROYD.

Sheffield, Oct. 5.

SIR,—I am glad you have kindly invited discussion on this question, as otherwise I should not have taken up your valuable space in making a few observations on the two letters in your issue of September 25, signed by Mr. Fitch and "E. H. S.," and who, if they had only devoted a little more time to the provisions of the Bill and less to their own super-heated imaginations, would have been infinitely less hysterical.

I think no person of ordinary intelligence can read those two letters without coming to the conclusion that there is, at least, some justification for the Bill, because I am quite sure that if the Bill had been in force, and if as a consequence those two gentlemen had had time enough to shake their brains free from the muddling effects of incessant shop duties, they would never have made some of the absurd statements they have done.

It seems necessary at the outset to remind them that the Bill simply provides for the compulsory closing of shops at certain specified hours; but also that chemists may supply medicine and medical appliances at any hour without infringing the law; which provision may be considered a privilege or otherwise, but has evidently been inserted for the public welfare. It seems to be also quite as necessary to state that the Bill does not compel either Mr. Fitch or anyone else to remain on duty five minutes after closing time. If Mr. Fitch and "E. H. S." will only allow their indignation to cool down to its normal condition, then calmly read the provisions of the Bill over again, they will find very little foundation for a large portion of their letters. I should like to ask Mr. Fitch to be a little more definite in his statements, for he is extremely vague in some of his assertions. In what way, for instance, does the Bill favour the stores? Are they not to be treated like himself? Or has he been trading with their customers after their closing time, and is he frightened of the Bill stopping it? Such a thing might be very annoying, but it would form no argument against the Bill. Or, again, in what way does it "try to prevent him from making a living." A little information on these and other points would be very interesting. Some of his grievances have nothing to do with the Bill at all, such as his statement that "owing to so-called free trade people are so poor that, in case of sickness, they call in the doctor instead of the chemist." Can he support such a statement by the testimony of another single chemist in the whole United Kingdom?

With regard to the letter of "E. H. S." it reminds me of the story in "Pickwick" of a man who had been confined in the Fleet prison so long that he positively refused to leave it, and when compelled committed a crime in order to get back again. And we all know that that is not an uncommon occurrence. Are there not thousands of men who devote all their energies to one object so continually, either from choice or force of circumstances, that they deaden all their natural instincts and aspirations? What about the unfortunate assistants of a man whose state of mind is such that he thinks it a positive hardship to close on a Sunday, and who has not

got stamina enough in him to resist the tyranny of the public even in the smallest degree, but shrieks out fearfully when a strong hand proposes to take the tyrant by the throat? For, of course, the "Public," being nobody in particular, and therefore having no conscience, is a tyrant; but it has one attribute common to all tyrants in being a coward, and if it is only tackled in a determined manner it will give way; but the less it is resisted the more exacting it becomes.

"E. H. S." evidently keeps his shop open till midnight, in order to pamper a few idle theatricals who have neglected their war-paint all day, and rush in for it during the third act. I should think that so long as we have men with so little self-respect as to submit to this, so long will it be necessary to compel them to take a little time to realise their responsibilities in life. Surely such a man's till is his god! Is it not preferable to work in order to live, rather than live in order to work?

With regard to the Bill itself, I sincerely trust it may pass, either as it is or in a modified form. I think it is high time something was done to make shopkeepers a little more "as other men are"; to give them an opportunity to mingle more with their fellow men, and thus instil into them more of the manners of men, and less those of serving-men; to give them a chance of educating themselves on matters which every genuine man ought to know, but which are outside their calling; and to give their brain leisure to release itself from the incessant requirements of the counter, so that it may have breathing space to renew its flagging energies. I don't think there is any need to fear the effects of the Bill on our trade. As it affects all shops in one trade alike, the public will simply have to do their shopping sooner or leave it till next day. The demand will be just the same, and must be supplied, but in less time. One effect of the Bill would be a saving to the shopkeepers in London alone of a large sum annually in gas. Voluntary efforts are out of the question for many reasons, and I think any local public body such as is proposed to deal with the liquor traffic could not deal with this satisfactorily.

With regard to the exceptions in the Bill I don't see why there should be any except for refreshment houses. We must look after our stomachs at all times.

I earnestly trust that Sir J. Lubbock will not erase chemists and druggists from his Bill, but allow them the full benefit as far as possible.

In conclusion, I am glad to think that the vast majority of my fellow chemists are prepared to throw down the pestle at a decent hour, and thus give the public a hint that they too have a nervous system in common with all other animals.

I am, yours faithfully,

Baldon, Oct. 5.

H. ROBINSON.

SIR,—What a strange state of affairs it is that, talk to nearly any chemist and one hears little else but grumbling about long hours and cutting prices, and when Sir John Lubbock comes like a beam of sunshine with his Bill to lessen the toil and gladden the hearts of both principal and assistants, by shortening the hours of labour in our shops without any detriment to our pockets, seeing that all are to be served alike, there are to be found in our ranks dissatisfied men! In my opinion Sir John deserves the hearty support of all retail tradesmen; for what does anyone see of home comforts where 8 A.M. to 9 or 10 P.M. is the order of the day? It is all bed and work; neither apprentice nor assistant has time for studying, nor principals even to be sociable at home. All will well do with rest after twelve or thirteen hours waiting behind the counter. Even if they have next to nothing to fill up their time with I trust the Bill may pass, and truly wish Sir John Lubbock had made it seven o'clock the first four days, eight on Fridays, and ten on Saturdays. Excuse my possible waste of your valuable space.

Bradford.

Yours faithfully,

J. L. SAVAGE.

SIR,—May I add a few lines on Sir John Lubbock's Early Closing Bill? Firstly, eight o'clock is too early for suburban businesses; nine would answer better. It is said that if you close earlier your customers will shop earlier. Yes, probably next day in town. Secondly, if the Act is passed it should become operative everywhere, not being permissive. Many suburban businesses are carried on just on the edge of large

towns. Suppose the country district adopts the Act, the town does not, or *vice versa*; then one's customers have only to walk one or two hundred yards further along the road to a chemist who can keep open. Any suburban chemist can anticipate the result. I will not enter into any discussion as to the rights of the Bill, but this is the first time, I think, in the English legislature that a law will be passed which prevents a man from working as long as he likes at his own profession or trade, which I contend is interfering with the liberty of the subject. I quite agree with your correspondent, Mr. Fitch, about having to remain indoors to attend to customers, and yet not allowed to keep open. I fail to see the benefit of that.

Yours, &c.,

A SUBURBAN CHEMIST. (224/46.)

SIR,—Shall the projected Shop Hours Regulation Bill apply to chemists' shops, or are they to be exempted? It appears that we have the question now in our own hands, and we may join the glorious army of publicans and tobacconists or be protected from ourselves, just as we think to be more desirable. Shop hours are in most large towns, and in London especially, admittedly too long, as shown by the many voluntary movements of late years and the parliamentary legislation of last session. The voluntary movement, though right in theory, has in most, though not all, cases been a miserable failure, the collapse being due to greed or selfishness, states of mind fostered by unnatural confinement. Shall we invite the coercion of a paternal government to do for us what we are unable to do for ourselves?

Looked at broadly it amounts to this: Will shorter hours tend to make us physically and mentally better citizens, and consequently happier mortals, or do we require to be closed in a shop for four, five, or six hours of a night with half a dozen gas jets flaring around us, heating us like amateur cucumbers in a forcing frame? If late hours be beneficial, by all means let us continue them, but let us be sure that we are not sacrificing the man to the shopkeeper.

Looking at it from the lowest point of view, that of *l. s. d.*, I believe we should not be losers in the least degree. People have a certain amount of money to spend, and if it does not go at one time it does at another; they postpone making their purchases till the last possible moment, whether early or late. If ten be the hour they will come just before ten; if eight they will come before eight.

In poor districts there should be less need to keep open late than in wealthy ones. Working-men, as a rule, start work earlier and go to bed earlier than others; but the same inherent cause that makes them poor—want of forethought—also prevents them purchasing till the last moment, be it eight, nine, ten, or eleven o'clock. If they cannot get goods after eight they will go before.

I suppose that a man's real object in life is happiness, and that a chemist keeps a shop that he may by the money obtained from it be able to purchase a few of the ordinary aids towards happiness in some form. But if in the pursuit of the means he keeps open shop for fourteen or fifteen hours a day, leading an unnatural life of confinement, then he defeats his own aim and mistakes the means for the object, destroys the man to make the shopkeeper; and looked at as a mere shopkeeper the result is pitiable, for he will be a degenerate creature whose range of intellect becomes cramped, and whose fears and jealousies are centred in his opponent along the street.

Let us not be shut out from the provisions of the Bill, and we shall have the opportunity of escape from these little-nesses; all energy will not be expended in the shop; there will be time and inclination for a little healthful exercise and the cultivation of intellectual and social intercourse; we shall have an opportunity of finding that our neighbours in the same line of business are not the unworthy beings that we feared, but are, like ourselves, fond of harmony; and thus, knowing and respecting one another, we shall not be willing to harm our friends by an ungentlemanly action, an unfair business project, or evil-speaking. We shall not then envy the tobacconist and publican, but will pity them if they be doomed to their own destruction.

Yours truly,

JOSEPH WILSON.

Hornsey Rise, N.

SIR,—I for one feel greatly indebted to Sir John Lubbock (and his supporters) for introducing his "Shop Hours Regulation Bill," and which I trust will soon become law. As far as my experience goes, I am convinced that our only hope of ever getting earlier closing is by means of legislation. About eight years ago (soon after I commenced business for myself) I went round to the other members of the trade in my neighbourhood to see if they would close earlier, all of whom were very willing to do so with the exception of one, but after not a little persuasion he also agreed, so we decided to close at nine instead of ten o'clock.

It did not work well long, because the one I had all the difficulty with persisted in keeping open half an hour or more after all the others were closed. The result was that the scheme fell through altogether, and now each chemist adopts his own time of closing. Again, about twelve months ago I went round to the chemists in another neighbourhood with the same object in view. This time all were again willing save one, and he objected on the ground that he was a young beginner, and could not afford to close earlier. The result in his case was that none of the chemists closed earlier, so that he did not gain anything by it, but must have been a loser, because he would at least have saved so much gas by closing earlier. In these two neighbourhoods the long hours are entirely due to two solitary individuals, and I have no doubt there are hundreds similarly situated. Why should the minority thus rule the number of hours we should keep open? It is quite time it was put a stop to. Time has proved that we cannot do it ourselves, therefore I trust the trade will seize their opportunity while they have the chance and will support the Bill. There is no necessity for such long hours; we should be able to do our work just as easily in twelve hours as in fourteen, and I firmly believe that most of the objectors to the Bill are chemists who cannot afford to keep an assistant (they are therefore penned in almost without interruption), and, if so, the Bill would benefit them more than anyone else, because they would be able to get out at eight o'clock (without losing any of their trade), either for business, pleasure, or recreation, whereas the chemist who can keep an assistant is at liberty to get out any time, and yet I find that the former are the very men who object to earlier closing.

Assistants would reap great benefits from the Bill, and I am surprised they do not take the matter up. In all the large towns they might get up petitions in favour of the Bill, and send them to the promoter of the Bill, so as to convince him (if necessary) that the bulk of the trade are in favour of shorter hours.

Yours truly,

Monument Road, Birmingham,

J. T. GRIFFIN.

October 6.

SIR,—Like many others who have lived in country towns where the attempt at early closing has been made over and over again, only to be spoilt by some selfish member whom it did not personally benefit, I have long been aware there are many who do not think any number of hours too many to keep open for supplying unnecessary trifles to "maudlin" customers who are always ready to drive off their purchases, as they are now encouraged to do, till long past the proper hour for retiring to rest; but I did not think any would have ventured to air such grievances in your esteemed journal, but I trust Mr. Collis's reply will be taken to heart by any others who feel as "E. H. S."

If some wholesale houses would only take up the matter, and get signatures of chemists for or against early closing, I feel certain there would soon be overwhelming testimony that thousands of retail chemists, who only keep open because their neighbours do, would welcome, as I do, Sir John Lubbock's Bill as one of the greatest boons ever yet held out to us (even greater than the proposed curriculum).

Chemists only will be allowed to sell necessary medicines after eight p.m. What more could "E. H. S." wish?

Your obedient servant,

Norwood, October 6.

W. J. HENSON.

The B. P. C. Formulary.

SIR,—The statements of Messrs. Burroughs & Wellcome and Messrs. Symes & Co., coming as they do from interested sources, can scarcely be looked upon as weighty contributions to the discussion on Mr. Greenish's proposal.

The discussion, as far as it has gone, points to circumscribing the scope of the Committee's action to the publication of strengths for simple preparations of unofficial drugs, with perchance—this is by no means certain—the *modus operandi*. This half-loaf would be better than no bread; but if I read the B. P. C. President's address correctly, I take it that the speaker proposed also to publish formulae for those preparations which Messrs. Symes & Co. would prefer to keep secret. In secrecy is quackery—yet I think that certain gentlemen of high standing in the pharmaceutical world, and of considerable status in scientific circles, would feel mortally offended if we ventured to hint that when a certain farmyard fowl raised its voice in their vicinity its remarks would be personal.

As a hero-worshipper I regret that several speakers at the discussion on Mr. Reynolds's motion could not rise to the noble example of Mr. Martindale, in sinking personal considerations for the interest of pharmacy. Even the most obtuse amongst us cannot fail to perceive the "damning with faint praise" and laboured attempts to misunderstand the scope of the proposal.

If the mists of empiricism which surround pharmacy are to be dispelled, those who pose as our benefactors must not be so careful in looking to their pockets first and the "profession" afterwards. It is when some practical question such as this arises that we find—let us say a few—of the gods of pharmacy made of very poor clay indeed.

From the present discussion I opine that an array of weighty opposition will be brought against the publication of formulae for preparations of the "Mist. magnes. et bismuth. (Jones)" types, as to effectually prevent their appearance for the present, yet even in its mutilated state the "active thought" of Mr. Greenish will be productive of considerable benefit to the oft-bewildered pharmacist.

I trust that the proverbial slowness of officialism will not be allowed to obtain in this case, but that we shall speedily see the realisation of the scheme; and in the meantime we can pray for less sordidness of motive to prevail amongst mankind generally, and pharmacists particularly, to the end that quasi-quackery may be swept from at least the higher circles of pharmacy.

Yours truly,
INSTANTER. (224/48.)

Pharmacy in South Africa.

SIR,—I do not know whether any of your readers will care to know how the world wags here in South Africa, but should you consider what I am about to write of interest, you may publish the same in the columns of your valuable and most useful paper, which, I find, is read by a great many chemists throughout this country.

During the last few months I have made a tour through South Africa, and have visited all the important towns in the Cape Colony and Natal, and found the drug trade well represented. Shops much the same style and size as you would find in similar towns at home. I am now in Kimberley—as everyone knows, the centre of the diamond industry. Here there are any number of chemists, apparently doing well—as, if they have the business, their prices will enable them to do. I will give you a copy of a list of dispensing charges I copied this morning from a chemist's counter here:—

Mixtures.

Size	Dose	Price s. d.	Size	Dose	Price s. d.
24 oz.	3ss. to 3j.	9 0	6 oz.	3j.	5 0
12 oz.	"	5 0	6 oz.	3ss. to 3j.	2 6
8 oz.	3j.	6 6	4 oz.	"	2 6
8 oz.	3ss. to 3j.	4 0	4 oz.	5j. to 3ij.	3 6

Extra charged for sandal-wood oil, quinine, &c.

Lotions.

Size	Price s. d.
8 oz. ..	3 0
24 oz. ..	6 0
1 oz. ..	1 6

Draughts.

Size	Price s. d.
3 oz. ..	2 6
1 oz. ..	1 6

Pills.

Nos.	Price s. d.
12 ..	2 6
18 ..	3 6
60 ..	9 6

Gilded, 1s. per doz. extra.

Liniments.

Size	Price s. d.
16 oz. ..	10 0
8 oz. ..	5 6
1½ oz. ..	2 0

Plasters.

Size	Price s. d.
3×4	2 0
6×12	5 0
10×12	7 0

Suppositories.

6s. .. per doz.

Pessaries.

7s. .. per doz.

Bougies.

9s. .. per doz.

and everything else in proportionate prices.

Patents.—All 1s. 1½d. articles sell for 1s. 6d., and so on. These prices are a little higher than at Cape Town and other ports. Of course there is 500 miles of railway charges to add, which is no small item here. 6½. a ton cartage is charged for coal from Port Elizabeth to Kimberley, so coal costs here 8½. per ton.

This is all I purpose saying respecting the drug trade, but will make a few remarks respecting the mines, which may be of interest to some.

The discovery of the Kimberley mines is really due to a John O'Reilly, who, in the year 1867, was travelling in the Orange River district, when he called on a farmer named Schalk van Niekerk, who showed him some Orange River stones, out of which he picked a diamond weighing 21½ carats. He took it away, exhibited it to several people, and eventually it was sold to Sir Philip Wodehouse for 500½. The discovery was made known to the Governor in Cape Town, Sir Henry Barkley.

About two years later Mr. Niekerk bought a diamond of a Hottentot for oxen to the value of 400½., which he afterwards sold for 10,000½. It is now known as the "Star of South Africa," weighs 46½ carats, and is in the possession of the Countess of Dudley.

Prospecting went on after this for several years in many parts, but without any great success, and it was not until the year 1870 that the present mines at Kimberley were discovered.

The Orange Free State claimed to have right of government of the diggings, but its organisation was manifestly unfit to maintain law and order amongst such a growing community. The Griqualand West chief was doubtless the real owner, and he wished the British Government would take him under their protection, which they did, through Sir Henry Barkley, on October 27, 1871.

The yield of diamonds to the end of 1885 has exceeded 17½ million carats, equal to 3½ tons weight, of precious stones, in value about 20 millions sterling, whilst the total weight of ground and reef excavated exceeds 20 million tons.

The annual expenditure in labour, material, &c., is about 2 millions sterling. Kafir labour, at a cost of from 16s. to 20s. a week, is employed in all minor operations of the mines. About 10,000 Kafirs are daily employed; 25,000 horses and mules. White men get about 5½. a week.

With these few remarks I beg to conclude, and hope you will forgive me for taking up so much space.

Kimberley, South Africa, Yours faithfully,
September 12. W. SHEPPERSON.

THE AMSTERDAM QUININE WORKS, the future of which is to be decided on October 15, were founded in 1881 with a share capital of 1,000,000f. (about 83,000½.), of which, however, only two series of an aggregate of 400,000f. (about 33,000½.) have been issued. The concern has worked at a loss from the commencement, which at the close of 1885 was found to amount to 197,014 43f. (about 16,418½.), not including the loss caused through depreciation in value of plant, stock, &c., which alone amounted to 75,000f. (6,250½.). It is to cover this deficiency and to enable the directors to make a fresh start that an appeal for funds is to be made. It is proposed, as mentioned in THE CHEMIST AND DRUGGIST of October 2, to increase the capital by issuing the third series of shares of 200,000f. (16,600½.), but, as under the circumstances there is no possibility of this amount being subscribed, the board desire to reduce to 25 per cent. the present shares, so that the future working capital would consist of 200,000f. (16,600½.) priority shares (new capital), and 100,000f. (8,300½.) ordinary shares (replacing the old shares).

PURE OXIDE OF ZINC (HARRIS & CO.'S)

In 1-lb., 2-lb., 4-lb., 7-lb., 14-lb., and 28-lb. Boxes, 1/- lb. Special quotations to large buyers.

N.B.—EVERY PACKAGE HAS OUR SEAL UPON IT.

Great care is used in the preparation of our Oxide of Zinc, and it is superior to the ordinary Oxides sold as B.P., which frequently contain Arsenic and Sulphate of Zinc in sufficient quantities to prove irritating to the skin.

PHILIP HARRIS & CO., Manufacturing Wholesale and Export Chemists, **BIRMINGHAM.****THE LAMELLÆ OF THE NEW PHARMACOPŒIA** CAN BE OBTAINED IN BULK AND IN TUBES OF **SAVORY & MOORE,***The Original Makers of Ophthalmic and Hypodermic Discs, and other Medicated Gelatine Preparations, And whose Discs were taken as the Standard by the Pharmacopœia Authorities.*

The following Extract from the "BRITISH MEDICAL JOURNAL," of February 6, 1886, page 257, speaks for itself:—

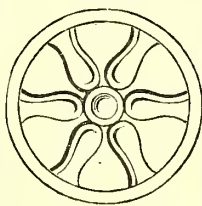
"Our attention has been called by Messrs. Savory & Moore to a statement made in a circular recently issued by another firm of chemists, the purport of which would be to deprive them of the priority of invention and manufacture of the medicated gelatine discs now extensively in use for ophthalmic and hypodermic purposes. The fact is on public record, that these ophthalmic discs were first prepared by Messrs. Savory & Moore in the latter part of 1863, when they were extensively employed by Mr. Ernest Hart in the ophthalmic department of St. Mary's Hospital, as well as in private practice. This settles the question."

The Hypodermic Discs were first made by SAVORY & MOORE at the suggestion of Dr. ERNEST SANSOM in 1874.

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CHEST PROTECTORS,
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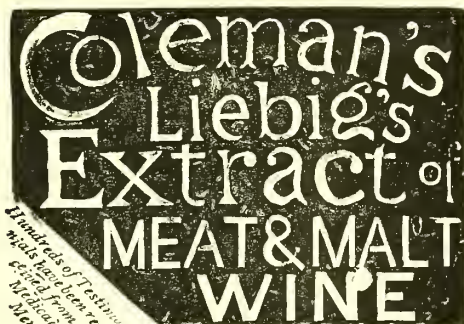
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Gentlemen, I received sample bottle of your "Extract of Beef and Malt Wine." I find that it is the same as I used extensively over two years ago, and which I found of so much benefit that I have used it ever since in my practice, and numbers of my patients get it for themselves. I have great confidence in it as a tonic and restorative. It is also very useful in cases of consumption.

I wish you would send me one dozen bottles, and then will send you money by return. You can send it by rail by G.E.R. on to the G.N.R., and then it will come direct to Leeds.

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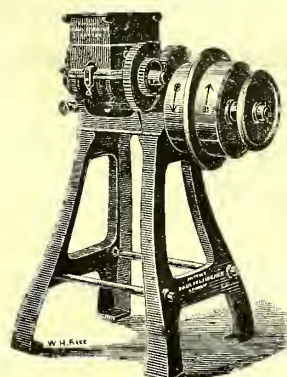
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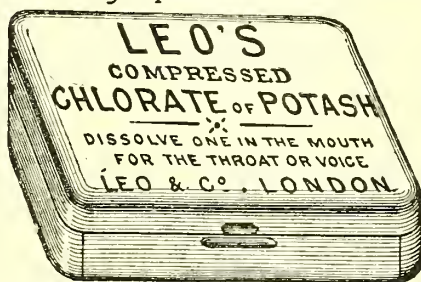
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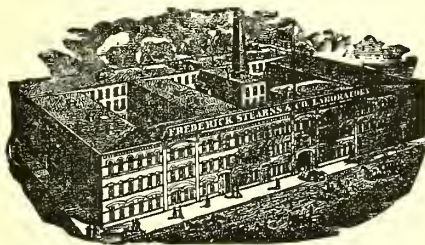
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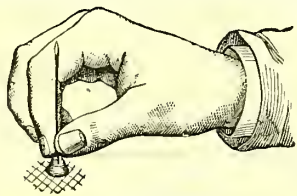
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HENRY'S GREAT INDIAN REMEDIES.



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"**THILUM**," for Rheumatism, Neuralgia, Wounds, Bronchitis, Chilblains (Broken or Unbroken).

"**OMUM CARPOOR**," for Indigestion, Cholera, Colic, Flatulence, Dysmenorrhœa.

"**JVARA-HARI**," for Fevers, particularly Malarious kinds, and as a Tonic.

"**HIPPEACEA**," the Stable Requisite for Broken Knees, Cracked Heels, Sprung Tendons, Mange, &c.

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**GOLD MEDALS—DUBLIN, 1882; BOSTON, 1883;
LONDON (INTERNATIONAL EXHIBITION), 1884.**

SIR JAMES MURRAY'S PURE FLUID MAGNESIA.

The ORIGINAL Article, as prepared by the Inventor, Sir James Murray, M.D.

For over 60 years in use as an excellent remedy in cases of
ACIDITY INDIGESTION, HEARTBURN, GRAVEL, AND GOUT.

Sold by all respectable Chemists, in LARGE-SIZED Bottles (the 1s. size containing nearly
Double the quantity usually sold at that price), at 1/, 2/6, and 3/6 each.

CAUTION.—Observe that the Signature of the Inventor is on every label.

SIR JAMES MURRAY'S FLUID CAMPHOR

Is a valuable remedy in cases of SLEEPLESSNESS and WEAK NERVES. Bottles, 1/ and 2/ each.

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Pharmacopœia and Throat Hospital Lozenges, Medicated Lozenges

OF VARIOUS KINDS, AND OF EXACT COMPOSITION.

BOILED SWEETS, of superior quality, for sale by Chemists and Druggists.

Chemists' own formulæ made up and stamped as may be desired. Lozenges to be prepared and stamped will require from 14 to 21 days.

As the WINTER SEASON is at hand we solicit the early instructions of our customers for goods which have to be specially prepared.

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Twemlow's Chlorodyne Lozenges and Chlorodyne Jujubes, Bronchial Lozenges, Children's Cough Lozenges, &c.

Sole Proprietors of TWEMLOW'S well-known CHLORODYNE. Largely used in Medical and Hospital Practice during the last Fifteen Years.

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**THE
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EQUAL TO AND CHEAPER THAN VASELINE.
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ALL DRUGS AND GUMS SORTED AND PACKED.

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METALLIC POWDER (REGISTERED)

Is the best, cheapest, and most effective Powder for cleaning and polishing Metals and Glass (especially Brass). It is used by the Life, Horse, and Dragon Guards, the Fire Brigades, &c., &c. Sold every where in 6d. and 1s. Boxes.

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Cheapest Sellers in the Market.

Chemicals, Drugs, and Oils at lowest market rates.

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Pure Acids—Valerianic Acid and all Valerianates. Antimony Golden Sulphuret, Antim. Crocus Lump, and Powder. Essences of Pear and Pineapple. Potassium Cyanide. Nitrate of Ammonia, crystal and granulated. Potass. Sulphid. Iron Perchloride, solid and solution. Hypophosphites of Lime, Manganese, Soda, Potash, &c.

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SELTZER, POTASS, LITHIA, SODA WATER, LEMONADE,
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PERFUMES, No. 30.

FIFTY KINDS.

9s. for 20 ozs., Carriage Paid.

Samples of any kind for 2 stamps.

When buying, compare my Perfumes with other makers', and buy the best.

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NON-POISONOUS.

THE BEST AND MOST RELIABLE, AND THEREFORE THE CHEAPEST.
ANTI-FRICTION GREASE, OILS, PAINTS, TAR, ROSIN, &c.

PITCH, in Boxes and Casks, from 1 lb. to 4 cwt.

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THE SALE IS
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IT HAS A MOST
PLEASANT TASTE.

The most certain and speedy remedy for Coughs, Colds, Hoarseness, and all disorders of the Chest and Lungs. It has proved itself the most successful preparation ever offered. In the nursery it is invaluable, as the children are fond of it. Immediately it is taken coughing ceases, restlessness is gone, and refreshing sleep ensues. No lady who has once tried it would ever afterwards be without it. Prepared only by **A. HAYMAN, Chemist, NEATH**, and sold by all Chemists in London and throughout the Kingdom. Price 1s. 1½d., 2s. 9d., and 4s. 6d. per bottle.

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Retail, Finest Selected, in Bottles only,

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¼ Pint, 1/;

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Quart, 6/6.

INDIGESTION,
CONSUMPTION,
FOR WEAKNESS.
JENSEN'S COD LIVER OIL

Price
in Bulk.

Per
Original Cask,
4/6 per gal'on.

In Winchester,
per doz., at
6/- per gal'on.

½ doz. same rate.

OF GUARANTEED PURITY.
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Prof. Sir CHAS. CAMERON—"A very pure article, quite free from rancid odour or nau-eous flavour."

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WHOLESALE DEPOT—

**THE BRITISH
HOP PACKING
COMPANY,**

Hop Factors,
Three Crown Square,
BORO', LONDON, S.E.

In ¼-lb., ½-lb., 1-lb., 2-lb., 3½-lb., 7-lb., & 14-lb. packets; and ¼-cwt., ½-cwt., 1-cwt., 1½-cwt., & 2-cwt. packages.

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Glass Bottles of every description, either Plain or Stoppered, made in White, Blue, Amber, Actinic Green, or any other colour required. Screw Nickel Capped Pomades, Honey Pots, Jelly Jars, &c., &c.

Makers of Opal Glass Covered Pots, in all sizes, which are far more Handsome and Cheaper than Earthenware.



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FOR
DISPENSING, DRUGS,
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PERFUMERY,
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&c., &c.

GLASS BOTTLES

MANUFACTURED BY

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FEEDING,
In GREEN &
WHITE GLASS,
and all
Kinds of Fittings.
Best Quality.

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HOME and FOREIGN BUYERS are invited to Correspond with us, as we have a very LARGE SELECTION to choose from.
Send for our Illustrated Price Current—a Revised Edition just out.

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We supply our celebrated 6 and 8 oz. Bottles at 8/ per gross. Name and address can be had on them if required, no extra charge. Also our White Moulded Phials at very low prices.

Send copy of order required, and get estimate from us before ordering of any other house.

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GLASS BOTTLE MANUFACTURERS,

25 Francis Street, Tottenham Court Road, London, W.C.

Established upwards of 50 years.

The Mormon Elder's DAMIANA WAFERS.

The most Powerful
INVIGORANT
Ever Produced.

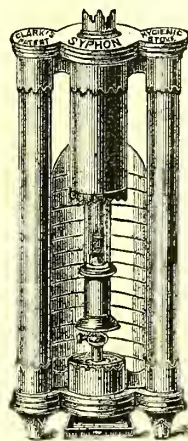
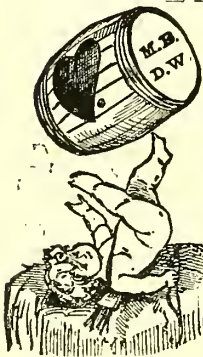
Permanently Restores those Weakened by Early Indiscretions. Imparts Youthful Vigor. Restores Vitality. Strengthens and Invigorates the BRAIN & NERVES. A Positive cure for IMPOTENCY & Nervous Debility. Prompt, Safe and Sure. 4s per box, 6 for 20s mailed to any address in the World on receipt of price. *Send for Circular*

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NO FLUE REQUIRED.

No smoke. No smell. No dirt or trouble. No danger. All sulphurous vapours are condensed inside the Stoves, and passed off as a liquid into tray beneath. The ONLY SAFE ones for use in Hospitals, Sick Chambers, Greenhouses, Bedrooms, Halls, Shops, Offices, Churches, Schools, &c. **BEWARE OF IMITATIONS.**

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Agents: MAW, SON & THOMPSON, Aldersgate Street, London, E.C.

HOLMAN LIVER PAD CO.'S REMEDIES.



(Trade Mark.)

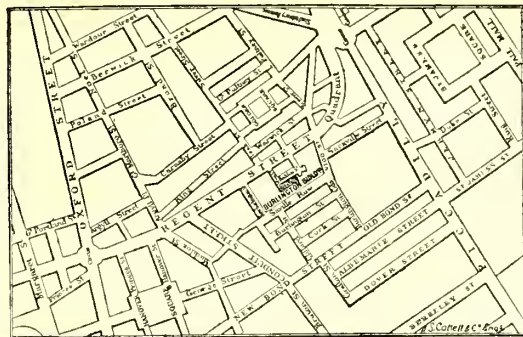
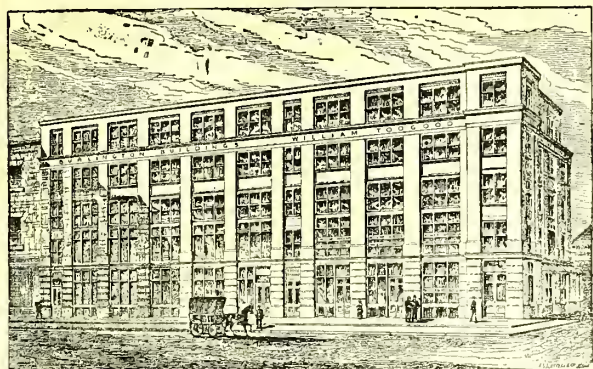
PRICE LIST.

	Retail	Per doz.
Holman's Liver and Stomach Pad (regular size) ..	10/	90/
Holman's Liver and Stomach Pad (special size) ..	15/	135/
Holman's Infant Pad (for children's diseases) ...	7/6	67/
Holman's Splenic Pad (for inveterate cases) ..	35/	315/6
Holman's Kidney Pad (for the kidneys & bladder) ..	10/	90/
Holman's Pectoral Pad (for lung diseases) ..	15/	135/
Holman's Abdominal Pad (for female complaints) ..	42/	378/
Holman's Absorptive Body Plasters ..	2/6	22/
Holman's Absorptive Foot Plasters, per pair ..	2/6	22/6
Absorption Salt (for medicinal baths) ..	1/	7/6
Tablets (for constipation) ..	5/	45/6

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**THE HOLMAN LIVER PAD CO.,
NEW YORK, U.S.A.**

Trade supplied by JOHN M. RICHARDS, 46 Holborn Viaduct, London, E.C.



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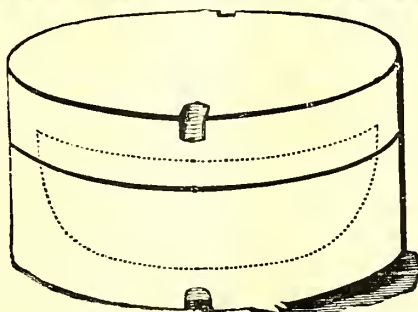
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WHOLESALE AND EXPORT
GLASS BOTTLE MANUFACTURER
 AND
DRUGGISTS' SUNDRYMAN,
 HAS REMOVED FROM
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 TO
 BURLINGTON BUILDINGS,
 HEDDON STREET, REGENT STREET, LONDON, W.

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EARTHENWARE COVERED POTS

Are claimed to be the most perfect and convenient yet offered to the Trade, and possess the following Advantages:—

1st.—An India-rubber Band passed vertically over the pot is kept in its place by the notches, and effectually secures the lid; for travelling this supplies a want greatly needed.

2nd.—The Covers being made quite flat, labels can be affixed with ease, and without creasing.



3rd.—The inside of the Pots being rounded or egg-shape, the contents can be entirely removed without waste.

4th.—Great attention has been paid to insure accuracy of contents.

PRICES, per gross.

$\frac{1}{8}$	$\frac{1}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	1	1 $\frac{1}{2}$ oz.
18/-	18/-	18/-	20/-	22/-	24/-
2	3	4	6	8 oz.	
27/-	34/-	42/-	54/-	66/-	

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Telegraphic Address: "TOOGOOD LONDON."

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William Toogood's Price Current of Glass Bottles, Measures, Earthenware, Druggists' Sundries, &c., will be forwarded post free upon application.

SPECIAL ATTENTION GIVEN TO SHIPPING ORDERS.

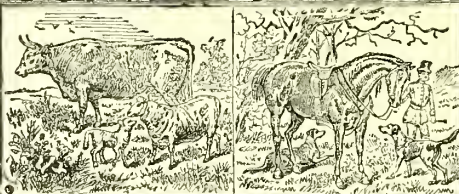
THE SCOUR IN LAMBS CURED BY THE DEVONSHIRE COMPOUND.

A distinct prepara-
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shire Oils.

In Bottles, 2/-

ESTABLISHED
1830
FOR CATTLE
HORSES
COWS-CALVES
SHEEP-LAMBS
DOGS &c.
Both
for Outward
and Inward
Use
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CORNER'S PINE'S



DEVONSHIRE OILS

SOLD
EVERYWHERE
THE GREAT
REMEDY
FOR ACCIDENTS
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Supplied by all
Wholesale
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CORNER'S FAMILY EMBROCATION

CURES—
Sore Throats,
Colds and Pains in
the Chest,
Lumbago,
Scalds, Burns,
Chilblains, Sprains,
&c., &c.
1s. 1 1/2.

HORSES.—LIEUT. JAMES' BLISTER

(Manufactured by R. J. JAMES, the Grandson of the Inventor).

THIS CELEBRATED BLISTER IS NOW OFFERED TO THE TRADE AT THE FOLLOWING REDUCED PRICES:—
1 oz. pots from 14/- per doz. to 12/6 per doz. 1 lb. pots from £4 0 0 per doz. to £4 0 0
2 " " £1 5 6 " £1 3 0 " 1 " " 7 16 0 " 7 10 0
4 " " 2 8 0 " 2 4 0 "

Observe the Trade Mark.—"A Horse's Head on the top of each Pot, and the signature, R. J. James."

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JAMES v. JAMES.—LORD ROMILLY, the Master of the Rolls, on February 23, 1872, declared "that I had an equal right with other members of the Inventor's family possessing the receipt to make and sell this Blister."—R. J. JAMES.

SILVER MEDAL
I.H.E. 1884.



THE ONLY
MEDAL AWARDED
FOR THIS
SPECIALITY

CHLORIDE OF LIME!
IN AIRTIGHT WATERPROOF
INVENTORS AND
MANUFACTURERS
NATIONAL CHEMICAL CO., LONDON

THE N. C. COS. PACKAGES HAVE STOOD THE TEST FOR MANY YEARS, AND CAN
ALWAYS BE RELIED UPON TO GIVE SATISFACTION.

KEPT IN STOCK BY ALL WHOLESALE DRUGGISTS &c.
SEE THEIR PRICE LISTS

SILVER MEDAL
I.H.E. 1884.



BEWARE
OF OTHER SO-
CALLED AIRTIGHT
PACKAGES.

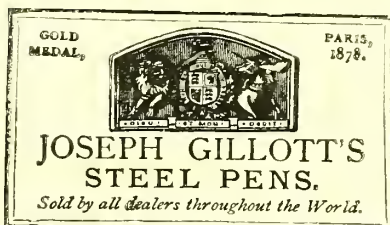
OKELL'S ORIGINAL MONA BOUQUET

Retail, 1/10, & 3/6; Wholesale, 7/12, & 22/6 per doz.

This much-admired Perfume (first introduced by the late Joseph Okell) may be obtained from the leading Patent Medicine Houses, Wholesale Druggists, and Druggists' Sundry Dealers.

Sole Consignee—THOMAS WEST, 59 and 61 Chester Road, Stretford, Lancashire.

Special Agents—B. G. LENNON & CO., London, and Port Elizabeth Cape Town, and East London, South Africa.

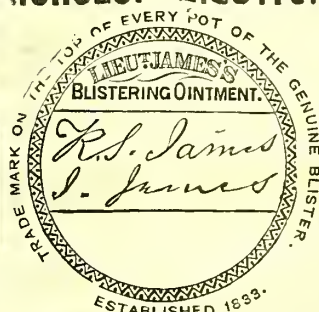


ESTABLISHED 1833. HORSES.—LIEUT. JAMES' BLISTER.

CAUTION.

The annexed Label is at the top of every Pot of the ORIGINAL and only GENUINE BLISTER.

The Messrs. Barclay & Sons, 95 Farringdon Street, London, and Messrs. Raimes & Co., Edinburgh, are now and have been Agents 52 years.

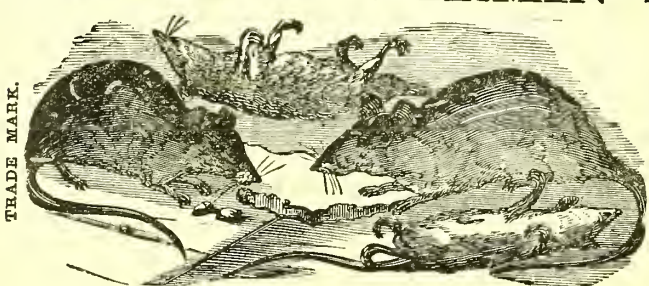


AGENTS.—Sutton & Co., 10 Bow Churchyard; W. Edwards & Son, 157 Queen Victoria Street; Newbery & Son, 37 Newgate Street; Evans, Lescher & Evans, Bartholomew Close; Burgoyne, Burdidges & Co., 16 Coleman Street; Lynch & Co., 171A Aldersgate Street; Southall Brothers and Barclays, Birmingham; R. Hovenden & Sons, 93 & 95 City Road, Finsbury; Sanger & Son, 150 Oxford Street; Millard & Sons, 40 Charterhouse Square; Curry & Soper, Shad Thames; A. A. Campbell, Leadenhall Street, London; Woolley, Sons & Co., 59 Market Street, Manchester; Apothecaries Company, Virginia St., Glasgow; John Thompson, 58 Hanover Street, Liverpool; Boileau & Co., Bride Street, Dublin; McMaster & Co., 121 & 122 Capel Street, Dublin; Clarke & McMullen, Victoria Street, Belfast; D. Galbraith, Londonderry; M. C. Delacre, Pharmacie Anglaise, Bruxelles. And by all Chemists, in Pots, 1/6, 2/9, 5/6, 9/1, and 16/1.

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W. H. JAMES, Sole Manufacturer, STANFORD, FARRINGTON, BERKS. Advertised in "Bell's Life" 56 years. Beware of Spurious imitations.

BATTLE'S VERMIN KILLER. { Mice eat it readily and Die on the spot.



Has an immense sale, and wherever introduced never fails to give satisfaction. Mice appear attracted to it as by magic, eat it readily, tumble about, and die on the spot. Rats usually die in their runs. Parties troubled with Vermin may be cleared at once, either from Stacks, Houses, or Ships.

TESTIMONIALS.—Thousands might be published.

From Mr. THOMAS COLTON, Agent for Selby.—A friend of mine purchased a Packet of your VERMIN KILLER last night, doubting its efficacy; to-day he called in to say that he had found fifteen dead mice, and had only used part of a packet.—From Mr. EDWARD STURDY, Flemington Mills.—I duly received by post the Packet of your VERMIN KILLER, and found it as represented in your advertisement. It speedily destroyed all the mice in my granary. I enclose 2s. for two more Packets.—Leeds, November 6th, 1857.—I have tried BATTLE'S VERMIN KILLER, and have found it most effectual in clearing my premises of LARGE QUANTITIES OF RATS.—THOMAS S. CROSLAND.—Mr. Stead.

Sold in Packets, 3d., 6d., and 1s. each.

SOLE PROPRIETOR:

Mr. J. R. BATTLE, Chemist, Lincoln, England.

No Chemist or Storekeeper should be without a supply.

BLAKE & MACKENZIE,
Medical Label Printers,
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 SPECIAL QUOTATIONS FOR LARGER QUANTITIES.

Medical Labels of every description
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PRESCRIPTION ENVELOPES
 Good Style and Quality,
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Over 5000 different kinds of STOCK LABELS.

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MEDICAL BOTTLES

Superior Quality, Plain and Grad., any Shape.

3 oz. & 4 oz. 6 oz. & 8 oz. 10 oz. & 12 oz.
 6/ 7/ 10/9 per gross.

Panelled, Pale Green, Best Quality.

1½ oz. & 2 oz. 3 oz. & 4 oz. 6 oz. & 8 oz. 10 oz. & 12 oz.
 6/8 7/3 8/3 12/ per gross.

N.B.—Not less than 6 gross assorted sizes sold at the above prices.

Equally low quotations for FLINT Bottles of all kinds.

THE NEW "QUININE" TINTED MEDICALS.

BOTTLES MADE FOR "SPECIALITIES."

Flint Vials, Moulded, Good Quality.

1 dr. 2 dr. ½ oz. 1 oz. 1½ oz. 2 oz. 3 oz. 4 oz.
 2/5 2/8 2/10 3/3 3/11 4/6 6/ 7/ per grs.
 Not less than 10 grs. assorted sizes at these prices.

"IMPROVED" BENT

FEEDING BOTTLES

With 7-inch black fittings, for grs., 27/; and lettered with any name and design free for 5 grs. orders.

Glass Screw "Feeders," with 7-in. Black Fittings, for grs., 33/.

All "Sundries" equally cheap, and guaranteed of a superior quality.

T. W. SIMCOCK,
 17 Guildford St., LEEDS.

TRADE MARK



THE GOLDEN FLEECE.

THE "LONDON" TOBACCO JUICE.

BY SPECIAL PERMISSION OF HER MAJESTY'S CUSTOMS FREE OF DUTY.

No. 1 contains 42 ozs. to the Gallon.

No. 2 contains 24 ozs. to the Gallon.

We confidently recommend No. 1 as being the Best and Cheapest Article in the Market. Also

TOBACCO POWDER (DUTY FREE).

WHOLESALE FROM THE MANUFACTURERS—

CORRY, SOPER, FOWLER & COMPANY (LIM.),
 18 FINSBURY STREET, E.C., AND SHAD THAMES, LONDON, S.E.



BY SPECIAL
 APPOINTMENT.

SPRATTS PATENT
MEAT "FIBRINE" VEGETABLE DOG CAKES
 (WITH BEETROOT).



BY SPECIAL
 APPOINTMENT.

DOG MEDICINES for the Cure of Distemper, Worms, Mange, Eczema, Ear Canker, Rheumatism, and the various other Canine Diseases. Full List and Pamphlet on Canine Diseases, post free.

"COMMON SENSE OF DOG DOCTORING," price 6d.

DOG SOAP.

LOCURIUM. Price 6d. and 2s. per Bottle, retail. A Patent Vegetable Oil, curing Sore Feet in Dogs, Cracked Heels, Broken Knees, or Sore Backs in Horses; and Sores, Bites, and Wounds of all kinds either in man or beast. Small Pamphlets on Canine Diseases supplied free for distribution.

WHOLESALE
 TERMS OF **SPRATTS PATENT LIMITED, LONDON, S.E.,** OR YOUR WHOLESALE
 HOUSE.

KEENE & ASHWELL'S

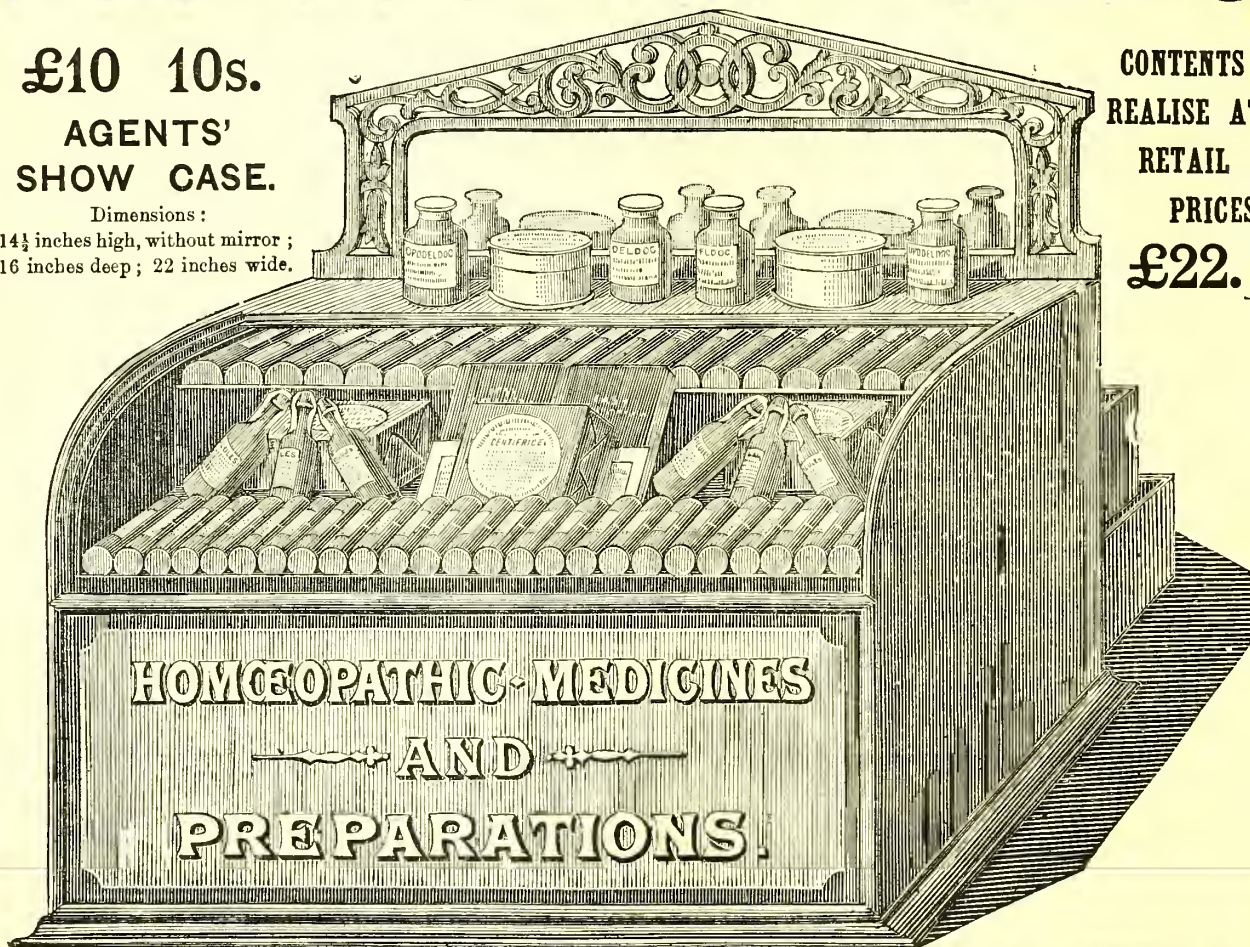
£10 10s.

AGENTS'
SHOW CASE.

Dimensions :

14½ inches high, without mirror ;
16 inches deep ; 22 inches wide.

CONTENTS
REALISE AT
RETAIL
PRICES.
£22.

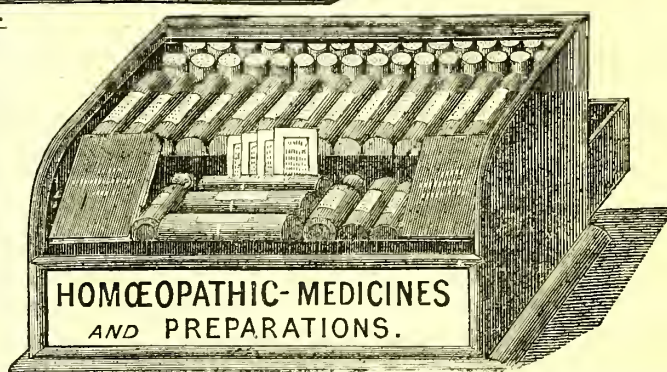


50/- AGENT'S SHOW CASE.

CONTENTS REALISE AT
RETAIL PRICES **105/-**

Size of 50s. Case, 16 x 10½ x 8.

This is the cheapest and best Homœopathic Show Case in the trade, and the only one with bent glass for the money. A list of others on application.



Homœopathic Medicines supplied in Bulk, and with Keene & Ashwell's "Companion to the Homœopathic Pharmacopœias," Chemists may be their own manufacturers. The "Companion," post free, 3/6, and Price Lists on application.

1/- SIZE,
1 oz.

CAMPHOR PILULES **3/9** Per doz.

FIND A READY SALE EVERYWHERE.

DEPÔT AND LABORATORY, **74 NEW BOND STREET.**
LONDON.

A copy of this Supplement is inserted in every number issued of "THE CHEMIST AND DRUGGIST."

SPECIAL EXTRA SUPPLEMENT.
OCT. 9, 1886.

BUSINESSES WANTED.
BUSINESSES FOR SALE.
PREMISES TO LET.

AUCTION SALES

PARTNERSHIPS.
SITUATIONS WANTED.
SITUATIONS VACANT.

EXCHANGE COLUMN

Advertisements for this Supplement must be prepaid, and can be received at the Office, 42 Cannon Street, until 5 p.m. on Thursday afternoon, or by first post on Friday morning of each week.

Remittances payable to EDWARD HALSE, crossed MARTIN & CO. Stamps are taken in payment.

The Terms for Advertisements in this Supplement will be found printed under each heading.

The VALUE of "THE CHEMIST & DRUGGIST."

TESTIMONY BY ADVERTISERS.

We have recently received many expressions of satisfaction from Advertisers, and amongst them is the following note:—

I am most gratified with the results of my advertising in your paper. I consider it by far the better journal for business than any other published. Facts speak for themselves. I find THE CHEMIST AND DRUGGIST mentioned ten times where other of our Trade Journals are once. I cannot allow this opportunity to pass without thanking you for the unremitting attention you have always shown. I must confess I had grave misgivings concerning your alteration from monthly to weekly publication; but, instead of fears, they are a pleasurable knowledge that business has increased wonderfully. (32/22.)

OFFICE: 42 CANNON STREET, LONDON, E.C.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C., CHEMISTS' TRANSFER AGENTS.

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION. Immediate attention given to Foreign Commissions. The Business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on Value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

Particulars of any of the following will be sent free on application:—

1. LONDON, E.C.—Returns £900; price £1,100.	8. NORTHANTS.—Mixed; returns £800; price £500.
2. LONDON, E. " £700 " £650.	9. KENT. " £882 " £850.
3. LONDON, S.W. " £700 " £600.	10. SOMERSET. " £500 " £450.
4. LONDON, S.W. " £400 " £300.	11. SOMERSET. " £300 " £300.
5. LONDON, W. " £700 " £1,000.	12. WORCESTERSHIRE. " £450 " £250.
6. LONDON, E.C. " £2,000 " £1,200.	13. NORFOLK. " £1,200 " £1,200.
7. LONDON, S.E. " £750 " £650.	14. SALOP. " £500 " £400.

N.B.—No CHARGE TO PURCHASERS. Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free. Terms for Valuation on application. Valuation appointments for October should be made early.

ORRIDGE & CO.

PARTNERSHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

A GENTLEMAN, A.P.S., is desirous of meeting with the Managership of a good business with a view to Partnership or Succession. "Minor," 8 Russell Terrace, St. David's Hill, Exeter.

PARTNER wanted—qualified, energetic Young Man, with about £300—immediately, to take place of retiring partner; exceptional opportunity for suitable man; strictest investigation invited. Address, in first instance, "Yorkshire," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TO LET.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

All Advertisements should reach the Office, 42 Cannon Street, by 5 p.m. on Thursday afternoon, or first post on Friday morning of each week.

A CHEMIST'S Shop, situated at Southtown, Great Yarmouth, opposite the Southtown Railway Station, commanding a fine business position; superior fittings and spacious interior. Inquire of W. Francis, Bridge Road, Southtown, Great Yarmouth.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

VILLAGE near Somersetshire coast; snug little Business paying over £100 a year net, steadily improving; no opposition for several miles; convenient house, stable, yard, outbuildings, and small garden; double-fronted shop; rent £16; full investigation invited; price £150, including good stock. The Medical Hall, Nailsea, Bristol.

A GOOD-CLASS Retail, Dispensing, and Agricultural Business, with Gilbey's sole Agency attached; best position in one of the best market and manufacturing towns in the North of England; splendid opportunity for intelligent business man with capital; satisfactory reasons for disposal; a bargain; must be sold. Apply, "Pharmacist," care of Wright, Layman, & Umney, Southwark St., London.

£280 will Purchase a Business returning £550 annually; net profits £200; convenient house; double-fronted shop; rent £30 per annum; investigation courted; proprietor going abroad; Dentistry alone would nearly double returns. Venables, Chemist, Kingston, Hereford.

23 YEARS ESTABLISHED.—Genuine ready-money Dispensing and Prescribing Business, capable of great improvement; double-fronted shop, well fitted and stocked; large house, &c.; must be sold at once; price £165 19s. (valuation); strict investigation and offers invited. Apply, X. Y. Z., care of Messrs. Evans, Sons, & Co., Hanover Street, Liverpool.

DEATH VACANCY.—For immediate sale, old-established Mixed Retail, Dispensing, Prescribing trade; same hands 40 years; returns 1885, £1,400; net profit £600; fine house, situated the best position market town, 20,000 inhabitants; price £1,200, including several valuable proprietaries, or offer. Apply Messrs. Berdoo & Co., 30 Jewry Street, Aldgate.

WESTERN SUBURB.—Good class light Retail and Dispensing, at full prices, in leading street of good class and prosperous suburb; satisfactory reason for sale; returns £450; price £350 to an immediate buyer; no reasonable offer will be refused. "West," care of Mr. Brett, Valuer, Leicester.

NORFOLK.—With immediate possession, an old-established Country Business; no opposition; returns about £400. For particulars apply Smith & Sons, Wholesale Druggists, Norwich.

WEST HARTLEPOOL.—A trustee under deed of assignment made for benefit of creditors has a Mixed Business to dispose of for ready money, a bargain; handsome mahogany fittings; shop, with dwelling-house attached, situate in a good thoroughfare, west end of town; the business has been established 7 years, doing a fair trade; rent £40; to realise quickly, £150 (considerably less than the cost of fitting up) will be taken for the whole of the fixtures, fittings, and trade utensils with small stock; immediate possession and rent free up to November 23; inspection invited. Address, Thomas Etheridge, Accountant, West Hartlepool.

LONDON, W. Busy main thoroughfare, 'busses stop at door.—Old-established (30 years) Chemist's Business for Sale; 11 years' lease at £90 (can let off half); commanding corner position, splendidly fitted; returns over £500 at full prices; a first-class opportunity for a young man who would push and cut, when returns could be more than doubled. Henry E. Joël, Auctioneer and Transfer Agent, 40A Pembroke Villas, Bayswater, W.

FIRST-CLASS OPPORTUNITY FOR SMALL CAPITALISTS.—A genuine Light Retail and Dispensing Business in a good residential and rapidly-increasing neighbourhood near Liverpool; good house, with modern conveniences; satisfactory reasons for disposal; lease if desired. Address, "Memo.," care of Messrs. W. & H. Jackson, Manesty Lane, Liverpool.

OLD-ESTABLISHED Chemist's, Drug, Grocery, Wine and Spirit Business for sale, in market town in Yorkshire; the business has been carried on for 50 years, and capable of great improvement; premises large and convenient; ingoing about £400. Apply, G. W. Townend, Bank Buildings, Goole.

A GOOD Chemist's Business with immediate possession; price £100, stock at option of purchaser; rent low; about 6,000 population; no opposition. Apply, J. Johnson, care of F. Smith, 32 Dowry Place, Coronation Road, Bristol.

£600.—**YORKSHIRE.**—Turnover £800; capable of great increase without increasing stock; rare chance; strict investigation welcome. Address, "Bargain," Office of THE CHEMIST AND DRUGGIST, 42 Cannon St., E.C.

FOR IMMEDIATE DISPOSAL, an old established Drug and Stationery Business in Lincolnshire; agricultural district; unopposed; returns £750; price £450; double-fronted shop; good house and garden; satisfactory reasons for disposal; strict investigation invited; no agents. Apply, R. B., 2 Silver Street, Lincoln.

EMPLOYERS WANTING ASSISTANTS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

JEWSBURY & BROWN, Manchester, require a qualified Assistant; must be thoroughly competent and reliable in first-class Dispensing. Apply by letter, giving full particulars.

PARIS.—The Pharmacie Continentale, at 116 Boulevard Haussmann, Paris, is in want of a good English Assistant, having a knowledge of French Pharmacy and of the French language, able to push business, and a good Salesman.

MANAGER.—Wanted, by 21st inst., married man, about 30 years of age, to manage branch business; salary and commission; must be a good Prescriber and able to Extract Teeth; references required as to character and ability; abstainer preferred. W. B. Smith, Chemist, Gosport.

WANTED, a Steady Man to take charge of Chemist and Druggist Business; must be honest and strictly temperate. Apply, G. W. Townend, Goole.

JUNIOR MECHANICAL DENTIST; one with some knowledge of Retail and Dispensing preferred. Apply, with full particulars, to H. T. Netten, Manor Street, Stoke Road, Stonehouse, Devon.

STEADY Young Man wanted as Warehouseman and Light Porter, to help in retail and be able to make tinctures, syrups, &c.; outdoor; first-class references essential; full particulars in first letter; country town. "Opium," care of Messrs. Wright, Layman & Umney, 50 Southwark Street, London.

WANTED, for New Zealand, a Laboratory Manager, not over 30 years of age, capable of manufacturing all Pharmacopœia preparations, Chloride Gold, Nitrate Silver, Photographic Chemicals, &c. Apply, stating salary, &c., G. H. E., care of "Housekeeper," 7 Union Court, Old Broad Street.

APPRENTICESHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

APPRENTICE; about 16; indoor; comfortable home, with every opportunity of acquiring a thorough knowledge of the business; moderate premium required. G. Harris, New Cross Pharmacy, New Cross Gate, S.E.

WANTED immediately, to place a well-educated Youth as indoor apprentice to a Chemist and Druggist in large inland country town. Address, P. E., 37 West Street, Leicester.

ASSISTANTS WANTING SITUATIONS.

1s. for twelve words; 6d. for every six words beyond.

An Assistant writes on October 2:—

"I put an advertisement in the 'Assistants Wanting Situations' column. It may be interesting to you to hear that it was attended with most satisfactory results. I consider the new arrangements a great boon to the trade." 222/29.

MANUFACTURING LABORATORY.—Advertiser (thorough practical man) seeks situation as Manager of Laboratory; 19 years' experience (16 as Manager in present situation); accustomed to Steam and Vacuum Pans, and thoroughly conversant with all the details of a manufacturing Laboratory; satisfactory reasons given for leaving present employers, and can furnish exceptional references. Address by letter, "Chester," 96 Warwick Street, Warwick Square, London, S.W.

A GENTLEMAN with a thorough connection in Scotland is open to engage with first-class Drug House. 44, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WHOLESALE.—Position of Invoice Clerk required; experience in large wholesale house; good reference. Apply, 36 Oxford Street, York.

WANTED, by an experienced Man at the Wet or Dry Counter; over 20 years' good character with an old-established firm. Address, C. F., 42 Victor Road, College Park, Harrow Road, W.

A S ASSISTANT, or Dispenser, to Surgeon; good prescriber; knowledge of dentistry; 14 years' experience; good references. H. Smith, 12 Westbourne Street, Eaton Square, London.

A S JUNIOR or Improver; light Retail and Dispensing; small salary; aged 24. "Spes," 9 Devonshire Road, Chiswick.

A SSISTANT; aged 22; 8 years' experience; abstainer; in or outdoor; good references. D., 366 Great Western Road, Glasgow.

A S TRAVELLER; a gentleman desires re-engagement. J. H., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

A SSISTANT; married; long experience; retail or wholesale. T. A., 66 Leven Street, Liverpool.

A S ASSISTANT; temporary or permanent; prescribes, extracts teeth, &c.; aged 32; good references. W., 28 Bunbury Street, Nottingham.

PERMANENT or otherwise; qualified; in or outdoor; good references. "Lux," 27 Winslow St., Liverpool, N.

A S LABORATORY Assistant.—A Young Man, having some years' experience (thorough knowledge of foods) in the laboratories of a public analyst and at Somerset House, wishes an engagement. Address, care of F. C. S., 71 Amer-sham Vale, New Cross.

JUNIOR ASSISTANT; 4 years' experience; town preferred. C. Roberts, Harwood Hall, Upminster, Essex.

MIXED BUSINESS; temporary or permanent; thoroughly acquainted with the routine; aged 23. A. Short, 1 Rosamond Street, Manchester.

TRAVELLER, or Manager; qualified; security if required. C., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

A SSISTANT; aged 28; London or South Coast; disengaged after 18th. "Rhys," Cadwaladr, Jones & Co., 23 Bayswater Terrace, W.

EVENING DISPENSER to a Chemist or Surgeon; services offered for board and lodging; neighbourhood of Regent's Park preferred; Minor qualification. H. R., 102 Balcombe Street, N.W.

A S ASSISTANT; temporary or permanent; Minor qualification; well up in dispensing; good counterman; good references; in town or country; disengaged; out or indoor. L. F., 52 Waddon New Road, Croydon.

A S JUNIOR; aged 21; 4 years' experience. Oliver Davies, Tougreffail, Llantrissant, Glam.

A S ASSISTANT; outdoors; permanency preferred; aged 23; 6 years' experience; disengaged October 25. F. Rowe, Veet Mill, Drewsteignton, near Chogford.

MISCELLANEOUS.

Special charges are made for Advertisements under this heading, which can be obtained on application.

All Advertisements should reach the Office, 42 Cannon Street, by 5 p.m. on Thursday afternoon, or first post on Friday morning of each week.

AUSTRALIAN DRUG & CHEMICAL FIRMS.

A DVERTISER, practical and experienced, knowing Home and Continental Markets, is open to Buy on Commission for a good house. Address, C. A. P. Green, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.

A LONDON HOUSE, whose Representative calls on Druggists in Scotland, is open to treat with another house to share his services, on the basis of half salary and expenses. 42, Offices of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

BOXES—LIGHT WOOD BOXES.—Boxes suitable for Chemists, for sending Bottles and all kinds of articles through the Post; strong Boxes made for Packing all kinds of articles; samples post free six stamps. Write for sample, giving size you require, stating whether hinged or sliding-lid boxes are wanted, to T. Casbon, Box Maker, Millfield Works, Peterboro'.

A MOST VALUABLE AGENCY.—One Agent wanted in every town and village (where not already appointed) for Birley's preparations of Free Phosphorus; established 50 years; prescribed by medical men of first standing; unstinted supply of 40-page pamphlets, showcards, &c. Price-list and terms of agency, Gordon Murray & Co., 17 Castle Street, Holborn, London.

OWING TO SALE OF LEASE.—Entire Stock and Hand-some Fittings of West-end Chemist; everything necessary for carrying on high-class business; first reasonable offer accepted. Order to view of Mr. Burgess, Chemist, Foubert's Place, Regent Street, W.

PURE Super. Ess. Bergamott, just arrived, 6s. 6d. lb.; new season's Ess. Lemon, pure, 6s. lb., both carriage paid. Browne, 51 Queen Street, Exeter.

TO CAPITALISTS.—A certain fortune to anyone who will find the means to advertise a certain specific for the cure of neuralgia, toothache, rheumatics, &c. Cures neuralgia in five minutes, never fails, has a splendid local reputation. As an inhalant the quickest cure known for hay fever, &c. "Inhalant," 40 Westow Hill, Upper Norwood, S.E.

PRELIMINARY AND MINOR.

ALL STUDENTS who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hills Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. 38 Pupils passed the last Examinations.

DENTAL.

WANTED, the mechanical work of one or two Dentists; neatness, efficiency, despatch, and moderate terms. Apply, 218/43, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

AN ESTABLISHED NEW YORK COMMISSION AGENCY,

Representing well-known English Manufacturing Chemists, and now doing an extensive business with the Wholesale Drug Trade of America, can introduce Specialties to advantage; highest references; correspondence solicited.

Address—FRANCIS J. MACNAUGHTAN, 20 Cedar Street, New York City, U.S.A.

TELEGRAPHIC ADDRESS: "Chemdrug London."

TELEPHONE No. 1852.

EXCHANGE COLUMN.

TERMS.

Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of 1d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or, if he pays 1d. per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of the CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.," and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as e.g., £1. 10s. 6d.

DEPOSIT OF MONEY.—In order to ensure safety we offer the following system:—The purchaser of anything advertised in the Exchange Column may remit the amount to us. We acknowledge receipt to both parties by post cards, and only pay the money deposited on the advice of the remitter. Whether returned to him or paid to the seller, we charge a commission of 6d. on any transaction of £3 or less, or 1s. if above that amount.

Remittances payable to EDWARD HALSE, at the G.P.O., London, and crossed MARTIN & Co.

FOR DISPOSAL.

Drugs and Chemicals.

About 26 lbs. carbon bisulphide, cheap Gibson, Chemist, Hull.

Fine Jamaica ginger root, unbleached, above 80 lbs. Exchange for citric or tartaric acid. 43/30.

Oil lavender, finest Mitcham, 1886. 6 oz.; 4 oz. 10/6, carriage paid. Knowles, Chemist, Wallington, Surrey.

Wehr, ess. bergamott, 6s. lb.; 4 lbs. bismuth subnit., 6s. 6d. lb.; 2 lbs. ol. mint Michig. 12s. lb.; 7 lbs. hydrargyrum, 1s. 9d. lb.; Wehr. es. lemon, 5s. 6d. lb. Spencer, Lingdale, Skelton, R.S.O.

Perregoric and laudanum, 1s. 10d. per lb.; teething powders (excellent), 4s. 6d. per gross; Woodnook Lane hair restorer, 1s. size, 5s. per doz.—this never fails; pure vaseline, 6d. per lb. Taylor, Chemist, Accrington.

Proprietary Articles.

1½ ous Myers' cattle spice to be sold cheap, in any quantities. 45/35.

About 2 doz. patents, including 2s. 9d. Henry's magnesia, 2s. 9d. Ford's balsam, 2s. 9d. Locock's wafers, &c.; what offers, cash or exchange? List sent. Ritchie, Chemist, Langholm.

Educational.

Equire's "Companion," 13th edition, new; Willis' "Materia Medica," "Pharmacy," "Handbook to Analysis," unsoiled; B.P., with additions, 1867, unsoiled; what offers? Price, 8 Union Terrace, Notting Hill.

Ogilvie's "Imperial Dictionary," in 4 vols., handsomely bound, cost over 5l.; also a "Family Physician," in 4 vols., gilt edges, cost 30s.; both quite new; what offers? G. Sutherland, 9 Faulkner Street, Chester.

Pharmaceutical Journal, 1879 complete, 1880 complete to October 2, 1881 complete to September 10, 1883 nearly complete, offers whole or parts; Pereira's "Materia Medica," vol. ii., parts 1 and 2, offers; midwifery forceps, Simpson's, long, new, 15s. Morrison, 19 Castle Gate, Nottingham.

What offers for Cas. 41's "Universal History," 48 parts; Cassel's "Family Magazine" for 1883; Pereira's "Materia Medica," Barber's "Companion," Lindley's "School Botany," Beasley's "Book of Prescriptions"? Capell, 11 North Street, Brighton.

Formulæ.

Don't pay "fancy prices" for recipes until you have given Brooks's a trial. List of 300 post free anywhere. "Glycerine Linctus," elegant, efficacious cough cure; "Peruvian Gout and Rheumatic Pills," "Cinchon-essence," resembles Rooke's Elixir, much cheaper; "Glycerine Cream," for chapped hands and all skin affections, pays well; "Hop Tonic," costs under 1s. lb., made instant; "Bronchelixer," certain cure for bronchitis, &c.; "Corn Solvent," better liked than any advertised; "Toothache Cure," sale certain; "Sanitary Lotion," indispensable nursery adjunct, sweet and clean; "Embrocatio Alb." (like Elliman's), best white oils made; "Lincolnshire Relish," mellow, piquant, appetising, "Trixy," most enchanting and delicious perfume extant; "Limes and Glycerine," snow-white, perfectly inseparable. Recipes 1s. 1d. each, 3 for 2s. 6d.; post free, with full directions and all particulars. Cut this out, and above thirteen will be sent as sample for 10s. Tom Brooks, Chemist, Louth, Lincolnshire.

Miscellaneous.

Enterprise tincture press, nearly new, carriage free, 27s. 6d. 43/31.

Sale or exchange, slightly soiled patents, Indian butterflies, beetles, other curios. Inglis, Delph, Oldham.

Tooth forceps, Tomes's, in leather pouch; also elevator. "Lewis," Huyton Pharmacy, Huyton, Liverpool.

Surplus drugs and patents, sale or exchange, cheap. Send for price list to Watson, Chemist, Shipley.

Glass bottles.—About 4 gross 3-oz. screw nickel-capped pomades, pale green, 11s. 6d. per gross; 3 gross 14-oz. round-shouldered vials, white, best quality; two or three other job lines equally cheap. Hearn, Riddell & Co., Kingsland Road, London.

Twenty 5l. fully-paid Investment Trust shares, paying 10 per cent.; offers wanted, whole or part; bargain to immediate purchaser, who will participate in early dividend. 44/34.

Copper still, holding 15 gallons, with tub for worm, and tin water-bath for distilling perfumes, price 15l.; machine for sheep ointment, to be worked either by one or two men, will make cwt. at a time, price 7l.; also 30 gross chip boxes (4-oz.), at 1s. 3d. per gross, pattern sent. Hutchin, Saffron Walden, Essex.

Shop Fittings.

Very elaborate mahogany dispensing screen, 7 ft. long, mirror centre, marble slab in front, glass case at each end with mirror backs, plate-glass throughout, shelves at back, gilt lettered glass tablets on top, almost new, exceedingly handsome, extreme height 3 ft. 6 in., only 8l. 10s., worth 15l., only wants seeing; upright mahogany glass cases, 20s. and 30s. each; very large handsome specie jar, almost new, 5l. Griffu, Chemist, Monument Road, Birmingham.

WANTED.

Label cabinet. Gibson, Chemist, Hull.

Arnold's Surgical Instrument Price List, latest edition; state price. 47/13.

Druitt's or other tooth instruments. Carter, Chemist, Woolwich.

Chemist and Druggist Treatise on Dispensing. Guest, Brentwood.

Chemist and Druggist's "Art of Dispensing." Cox, 33 Gay Street, Bath.

Medical paper occasionally, few days after issue; state terms. Doubleday, Dorking.

"Year Book of Pharmacy," 1878 to last issue. Reynor, Love Lane, Dublin.

An attractive advertising board for horse and cattle medicines, &c., 2 ft. wide, and from 3 to 6 ft. long; also small bagatelle board. Price, &c., to John Snowden, Chemist, York.

Outside lamp, tooth-brush case, jars, bottles, fittings, Bunsen's gas stove; cash or exchange. Morrison, 19 Castle Gate, Nottingham.

4d. each will be given for some complete copies of *The Chemist and Druggist* for Sept. 18 received during this week; please affix label on wrapper; also copies of June 19, 1886. 20/40, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.